Table 7.1oo Child Resident RME Soil at Property 30448
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	766	mg/kg	766	mg/kg	M	9.8E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	766	mg/kg	766	mg/kg	M	2.7E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

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Table 7.1oo Child Resident CTE Soil at Property 30448
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	766	mg/kg	766	mg/kg	M	3.4E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	766	mg/kg	766	mg/kg	M	3.8E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1pp Adult Resident RME Soil at Property 30553
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	1.6E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.6E-02
	Antimony	4.7	mg/kg	4.7	mg/kg	M	6.4E-06	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	1.6E-02
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.5E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	5.2E-02
	Barium	443	mg/kg	443	mg/kg	M	6.1E-04	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.0E-03
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	2.2E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	7.4E-02
	Iron	18300	mg/kg	18300	mg/kg	M	2.5E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	3.6E-02
	Lead	719	mg/kg	719	mg/kg	M	9.8E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	2.2E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	1.6E-02
	Vanadium	41	mg/kg	41	mg/kg	M	5.6E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	8.0E-03
	Zinc	367	mg/kg	367	mg/kg	M	5.0E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.7E-03
	(Total)												2.2E-01
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	6.6E-04	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	6.6E-04
	Antimony	4.7	mg/kg	4.7	mg/kg	M	2.6E-07	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	4.3E-03
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.9E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	6.2E-03
	Barium	443	mg/kg	443	mg/kg	M	2.4E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.7E-03
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	8.9E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	3.0E-03
	Iron	18300	mg/kg	18300	mg/kg	M	1.0E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.4E-03
	Lead	719	mg/kg	719	mg/kg	M	3.9E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	8.7E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	1.6E-02
	Vanadium	41	mg/kg	41	mg/kg	M	2.2E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.2E-02
	Zinc	367	mg/kg	367	mg/kg	M	2.0E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	6.7E-05
	(Total)												4.5E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1pp Adult Resident CTE Soil at Property 30553
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	5.8E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	5.8E-03
	Antimony	4.7	mg/kg	4.7	mg/kg	M	2.3E-06	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	5.6E-03
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	5.4E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.8E-02
	Barium	443	mg/kg	443	mg/kg	M	2.1E-04	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.1E-03
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	7.8E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	2.6E-02
	Iron	18300	mg/kg	18300	mg/kg	M	8.8E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.3E-02
	Lead	719	mg/kg	719	mg/kg	M	3.4E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	7.7E-04	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	5.5E-03
	Vanadium	41	mg/kg	41	mg/kg	M	2.0E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	2.8E-03
	Zinc	367	mg/kg	367	mg/kg	M	1.8E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	5.9E-04
	(Total)												7.8E-02
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	6.6E-05	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	6.6E-05
	Antimony	4.7	mg/kg	4.7	mg/kg	M	2.6E-08	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	4.3E-04
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.9E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	6.2E-04
	Barium	443	mg/kg	443	mg/kg	M	2.4E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.7E-04
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	8.9E-08	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	3.0E-04
	Iron	18300	mg/kg	18300	mg/kg	M	1.0E-04	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.4E-04
	Lead	719	mg/kg	719	mg/kg	M	3.9E-06	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	8.7E-06	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	1.6E-03
	Vanadium	41	mg/kg	41	mg/kg	M	2.2E-07	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.2E-03
	Zinc	367	mg/kg	367	mg/kg	M	2.0E-06	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	6.7E-06
	(Total)												4.5E-03
												Total Hazard Index Across All Exposure Routes/Pathways	8.3E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1pp Child Resident RME Soil at Property 30553
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	1.5E-01	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.5E-01
	Antimony	4.7	mg/kg	4.7	mg/kg	M	6.0E-05	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	1.5E-01
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.4E-04	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	4.8E-01
	Barium	443	mg/kg	443	mg/kg	M	5.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.8E-02
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	2.1E-04	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	6.9E-01
	Iron	18300	mg/kg	18300	mg/kg	M	2.3E-01	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	3.3E-01
	Lead	719	mg/kg	719	mg/kg	M	9.2E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	2.0E-02	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	1.5E-01
	Vanadium	41	mg/kg	41	mg/kg	M	5.2E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	7.5E-02
	Zinc	367	mg/kg	367	mg/kg	M	4.7E-03	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.6E-02
	(Total)												2.1E+00
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	4.3E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	4.3E-03
	Antimony	4.7	mg/kg	4.7	mg/kg	M	1.7E-06	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	2.8E-02
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.2E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	4.0E-02
	Barium	443	mg/kg	443	mg/kg	M	1.6E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.1E-02
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	5.8E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.9E-02
	Iron	18300	mg/kg	18300	mg/kg	M	6.6E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	9.4E-03
	Lead	719	mg/kg	719	mg/kg	M	2.6E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	5.7E-04	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	1.0E-01
	Vanadium	41	mg/kg	41	mg/kg	M	1.5E-05	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	8.2E-02
	Zinc	367	mg/kg	367	mg/kg	M	1.3E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	4.4E-04
	(Total)												3.0E-01
												Total Hazard Index Across All Exposure Routes/Pathways	2.4E+00

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1pp Child Resident CTE Soil at Property 30553
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	5.4E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	5.4E-02
	Antimony	4.7	mg/kg	4.7	mg/kg	M	2.1E-05	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	5.3E-02
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	5.1E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.7E-01
	Barium	443	mg/kg	443	mg/kg	M	2.0E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	9.9E-03
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	7.3E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	2.4E-01
	Iron	18300	mg/kg	18300	mg/kg	M	8.2E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.2E-01
	Lead	719	mg/kg	719	mg/kg	M	3.2E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	7.2E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	5.1E-02
	Vanadium	41	mg/kg	41	mg/kg	M	1.8E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	2.6E-02
	Zinc	367	mg/kg	367	mg/kg	M	1.6E-03	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	5.5E-03
	(Total)												7.3E-01
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	6.0E-04	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	6.0E-04
	Antimony	4.7	mg/kg	4.7	mg/kg	M	2.4E-07	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	3.9E-03
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.7E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	5.7E-03
	Barium	443	mg/kg	443	mg/kg	M	2.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.6E-03
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	8.2E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	2.7E-03
	Iron	18300	mg/kg	18300	mg/kg	M	9.2E-04	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.3E-03
	Lead	719	mg/kg	719	mg/kg	M	3.6E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	8.0E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	1.4E-02
	Vanadium	41	mg/kg	41	mg/kg	M	2.1E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.1E-02
	Zinc	367	mg/kg	367	mg/kg	M	1.8E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	6.1E-05
	(Total)												4.2E-02
												Total Hazard Index Across All Exposure Routes/Pathways	7.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1qq Adult Resident RME Soil at Property 30577
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30577
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	498	mg/kg	498	mg/kg	M	6.8E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	498	mg/kg	498	mg/kg	M	2.7E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1qq Adult Resident CTE Soil at Property 30577
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30577
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	498	mg/kg	498	mg/kg	M	2.4E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	498	mg/kg	498	mg/kg	M	2.7E-06	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1qq Child Resident RME Soil at Property 30577
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30577
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	498	mg/kg	498	mg/kg	M	6.4E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	498	mg/kg	498	mg/kg	M	1.8E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1qq Child Resident CTE Soil at Property 30577
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30577
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	498	mg/kg	498	mg/kg	M	2.2E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	498	mg/kg	498	mg/kg	M	2.5E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1rr Adult Resident RME Soil at Property 30651
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30651
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	22200	mg/kg	22200	mg/kg	M	3.0E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	3.0E-02
	Antimony	4.1	mg/kg	4.1	mg/kg	M	5.6E-06	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	1.4E-02
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	2.4E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	7.9E-02
	Barium	391	mg/kg	391	mg/kg	M	5.4E-04	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.7E-03
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	4.7E-06	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	4.7E-03
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	9.9E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	3.3E-02
	Iron	32100	mg/kg	32100	mg/kg	M	4.4E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	6.3E-02
	Lead	913	mg/kg	913	mg/kg	M	1.3E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	611	mg/kg	611	mg/kg	M	8.4E-04	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	6.0E-03
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	8.3E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	1.2E-02
	Zinc	633	mg/kg	633	mg/kg	M	8.7E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	2.9E-03
	(Total)												2.5E-01
Dermal	Aluminum	22200	mg/kg	22200	mg/kg	M	1.2E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.2E-03
	Antimony	4.1	mg/kg	4.1	mg/kg	M	2.2E-07	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	3.7E-03
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	2.8E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	9.4E-03
	Barium	391	mg/kg	391	mg/kg	M	2.1E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.5E-03
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.9E-08	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	7.4E-04
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	3.9E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.3E-03
	Iron	32100	mg/kg	32100	mg/kg	M	1.8E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.5E-03
	Lead	913	mg/kg	913	mg/kg	M	5.0E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	611	mg/kg	611	mg/kg	M	3.3E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	6.0E-03
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	3.3E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.8E-02
	Zinc	633	mg/kg	633	mg/kg	M	3.5E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.2E-04
	(Total)												4.5E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.9E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1rr Adult Resident CTE Soil at Property 30651
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30651
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	22200	mg/kg	22200	mg/kg	M	1.1E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.1E-02
	Antimony	4.1	mg/kg	4.1	mg/kg	M	2.0E-06	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	4.9E-03
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	8.2E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	2.7E-02
	Barium	391	mg/kg	391	mg/kg	M	1.9E-04	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	9.4E-04
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.6E-06	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	1.6E-03
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	3.5E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.2E-02
	Iron	32100	mg/kg	32100	mg/kg	M	1.5E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.2E-02
	Lead	913	mg/kg	913	mg/kg	M	4.4E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	611	mg/kg	611	mg/kg	M	2.9E-04	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	2.1E-03
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	2.9E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	4.1E-03
	Zinc	633	mg/kg	633	mg/kg	M	3.0E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.0E-03
	(Total)												8.6E-02
Dermal	Aluminum	22200	mg/kg	22200	mg/kg	M	1.2E-04	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.2E-04
	Antimony	4.1	mg/kg	4.1	mg/kg	M	2.2E-08	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	3.7E-04
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	2.8E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	9.4E-04
	Barium	391	mg/kg	391	mg/kg	M	2.1E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.5E-04
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.9E-09	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	7.4E-05
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	3.9E-08	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.3E-04
	Iron	32100	mg/kg	32100	mg/kg	M	1.8E-04	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.5E-04
	Lead	913	mg/kg	913	mg/kg	M	5.0E-06	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	611	mg/kg	611	mg/kg	M	3.3E-06	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	6.0E-04
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	3.3E-07	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.8E-03
	Zinc	633	mg/kg	633	mg/kg	M	3.5E-06	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.2E-05
	(Total)												4.5E-03
												Total Hazard Index Across All Exposure Routes/Pathways	9.1E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1rr Child Resident RME Soil at Property 30651
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30651
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	22200	mg/kg	22200	mg/kg	M	2.8E-01	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	2.8E-01
	Antimony	4.1	mg/kg	4.1	mg/kg	M	5.2E-05	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	1.3E-01
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	2.2E-04	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	7.3E-01
	Barium	391	mg/kg	391	mg/kg	M	5.0E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.5E-02
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	4.3E-05	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	4.3E-02
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	9.2E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	3.1E-01
	Iron	32100	mg/kg	32100	mg/kg	M	4.1E-01	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	5.9E-01
	Lead	913	mg/kg	913	mg/kg	M	1.2E-02	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	611	mg/kg	611	mg/kg	M	7.8E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	5.6E-02
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	7.7E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	1.1E-01
	Zinc	633	mg/kg	633	mg/kg	M	8.1E-03	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	2.7E-02
	(Total)												2.3E+00
Dermal	Aluminum	22200	mg/kg	22200	mg/kg	M	7.9E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	7.9E-03
	Antimony	4.1	mg/kg	4.1	mg/kg	M	1.5E-06	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	2.4E-02
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	1.8E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	6.2E-02
	Barium	391	mg/kg	391	mg/kg	M	1.4E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.0E-02
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.2E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	4.9E-03
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	2.6E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	8.6E-03
	Iron	32100	mg/kg	32100	mg/kg	M	1.1E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.6E-02
	Lead	913	mg/kg	913	mg/kg	M	3.3E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	611	mg/kg	611	mg/kg	M	2.2E-04	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	3.9E-02
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	2.2E-05	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.2E-01
	Zinc	633	mg/kg	633	mg/kg	M	2.3E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	7.6E-04
	(Total)												2.9E-01
												Total Hazard Index Across All Exposure Routes/Pathways	2.6E+00

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1rr Child Resident CTE Soil at Property 30651
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30651
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	22200	mg/kg	22200	mg/kg	M	9.9E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	9.9E-02
	Antimony	4.1	mg/kg	4.1	mg/kg	M	1.8E-05	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	4.6E-02
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	7.7E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	2.6E-01
	Barium	391	mg/kg	391	mg/kg	M	1.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.7E-03
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.5E-05	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	1.5E-02
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	3.2E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.1E-01
	Iron	32100	mg/kg	32100	mg/kg	M	1.4E-01	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.1E-01
	Lead	913	mg/kg	913	mg/kg	M	4.1E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	611	mg/kg	611	mg/kg	M	2.7E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	2.0E-02
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	2.7E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	3.9E-02
	Zinc	633	mg/kg	633	mg/kg	M	2.8E-03	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	9.4E-03
	(Total)												8.1E-01
Dermal	Aluminum	22200	mg/kg	22200	mg/kg	M	1.1E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.1E-03
	Antimony	4.1	mg/kg	4.1	mg/kg	M	2.1E-07	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	3.4E-03
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	2.6E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	8.6E-03
	Barium	391	mg/kg	391	mg/kg	M	2.0E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.4E-03
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.7E-08	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-04
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	3.6E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.2E-03
	Iron	32100	mg/kg	32100	mg/kg	M	1.6E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.3E-03
	Lead	913	mg/kg	913	mg/kg	M	4.6E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	611	mg/kg	611	mg/kg	M	3.1E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	5.5E-03
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	3.0E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.7E-02
	Zinc	633	mg/kg	633	mg/kg	M	3.2E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.1E-04
	(Total)												4.1E-02
												Total Hazard Index Across All Exposure Routes/Pathways	8.5E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1ss Adult Resident RME Soil at Property 30911
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30911
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	18200	mg/kg	18200	mg/kg	M	2.5E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	2.5E-02
	Antimony	3.2	mg/kg	3.2	mg/kg	M	4.4E-06	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	1.1E-02
	Arsenic	25	mg/kg	25	mg/kg	M	3.4E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.1E-01
	Barium	602	mg/kg	602	mg/kg	M	8.2E-04	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.1E-03
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	1.1E-05	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	1.1E-02
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	1.6E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	5.3E-02
	Iron	39100	mg/kg	39100	mg/kg	M	5.4E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	7.7E-02
	Lead	862	mg/kg	862	mg/kg	M	1.2E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	685	mg/kg	685	mg/kg	M	9.4E-04	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	6.7E-03
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	8.1E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	1.2E-02
	Zinc	1150	mg/kg	1150	mg/kg	M	1.6E-03	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	5.3E-03
	(Total)												3.2E-01
Dermal	Aluminum	18200	mg/kg	18200	mg/kg	M	9.9E-04	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	9.9E-04
	Antimony	3.2	mg/kg	3.2	mg/kg	M	1.7E-07	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	2.9E-03
	Arsenic	25	mg/kg	25	mg/kg	M	4.1E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.4E-02
	Barium	602	mg/kg	602	mg/kg	M	3.3E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.4E-03
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	4.4E-08	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.8E-03
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	6.3E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	2.1E-03
	Iron	39100	mg/kg	39100	mg/kg	M	2.1E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	3.1E-03
	Lead	862	mg/kg	862	mg/kg	M	4.7E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	685	mg/kg	685	mg/kg	M	3.7E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	6.7E-03
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	3.2E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.8E-02
	Zinc	1150	mg/kg	1150	mg/kg	M	6.3E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	2.1E-04
	(Total)												5.2E-02
												Total Hazard Index Across All Exposure Routes/Pathways	3.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1ss Adult Resident CTE Soil at Property 30911
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30911
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	18200	mg/kg	18200	mg/kg	M	8.7E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	8.7E-03
	Antimony	3.2	mg/kg	3.2	mg/kg	M	1.5E-06	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	3.8E-03
	Arsenic	25	mg/kg	25	mg/kg	M	1.2E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	4.0E-02
	Barium	602	mg/kg	602	mg/kg	M	2.9E-04	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.4E-03
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	3.9E-06	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	3.9E-03
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	5.6E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.9E-02
	Iron	39100	mg/kg	39100	mg/kg	M	1.9E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.7E-02
	Lead	862	mg/kg	862	mg/kg	M	4.1E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	685	mg/kg	685	mg/kg	M	3.3E-04	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	2.3E-03
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	2.8E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	4.1E-03
	Zinc	1150	mg/kg	1150	mg/kg	M	5.5E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.8E-03
	(Total)												1.1E-01
Dermal	Aluminum	18200	mg/kg	18200	mg/kg	M	9.9E-05	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	9.9E-05
	Antimony	3.2	mg/kg	3.2	mg/kg	M	1.7E-08	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	2.9E-04
	Arsenic	25	mg/kg	25	mg/kg	M	4.1E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.4E-03
	Barium	602	mg/kg	602	mg/kg	M	3.3E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.4E-04
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	4.4E-09	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.8E-04
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	6.3E-08	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	2.1E-04
	Iron	39100	mg/kg	39100	mg/kg	M	2.1E-04	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	3.1E-04
	Lead	862	mg/kg	862	mg/kg	M	4.7E-06	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	685	mg/kg	685	mg/kg	M	3.7E-06	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	6.7E-04
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	3.2E-07	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.8E-03
	Zinc	1150	mg/kg	1150	mg/kg	M	6.3E-06	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	2.1E-05
	(Total)												5.2E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1ss Child Resident RME Soil at Property 30911
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30911
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	18200	mg/kg	18200	mg/kg	M	2.3E-01	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	2.3E-01
	Antimony	3.2	mg/kg	3.2	mg/kg	M	4.1E-05	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	1.0E-01
	Arsenic	25	mg/kg	25	mg/kg	M	3.2E-04	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.1E+00
	Barium	602	mg/kg	602	mg/kg	M	7.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.8E-02
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	1.0E-04	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	1.0E-01
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	1.5E-04	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	4.9E-01
	Iron	39100	mg/kg	39100	mg/kg	M	5.0E-01	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	7.1E-01
	Lead	862	mg/kg	862	mg/kg	M	1.1E-02	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	685	mg/kg	685	mg/kg	M	8.8E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	6.3E-02
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	7.6E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	1.1E-01
	Zinc	1150	mg/kg	1150	mg/kg	M	1.5E-02	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	4.9E-02
	(Total)												3.0E+00
Dermal	Aluminum	18200	mg/kg	18200	mg/kg	M	6.5E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	6.5E-03
	Antimony	3.2	mg/kg	3.2	mg/kg	M	1.1E-06	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	1.9E-02
	Arsenic	25	mg/kg	25	mg/kg	M	2.7E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	8.9E-02
	Barium	602	mg/kg	602	mg/kg	M	2.2E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.5E-02
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	2.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.2E-02
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	4.2E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.4E-02
	Iron	39100	mg/kg	39100	mg/kg	M	1.4E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.0E-02
	Lead	862	mg/kg	862	mg/kg	M	3.1E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	685	mg/kg	685	mg/kg	M	2.5E-04	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	4.4E-02
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	2.1E-05	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.2E-01
	Zinc	1150	mg/kg	1150	mg/kg	M	4.1E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.4E-03
	(Total)												3.4E-01
												Total Hazard Index Across All Exposure Routes/Pathways	3.3E+00

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1ss Child Resident CTE Soil at Property 30911
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30911
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	18200	mg/kg	18200	mg/kg	M	8.1E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	8.1E-02
	Antimony	3.2	mg/kg	3.2	mg/kg	M	1.4E-05	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	3.6E-02
	Arsenic	25	mg/kg	25	mg/kg	M	1.1E-04	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	3.7E-01
	Barium	602	mg/kg	602	mg/kg	M	2.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.3E-02
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	3.6E-05	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	3.6E-02
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	5.2E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.7E-01
	Iron	39100	mg/kg	39100	mg/kg	M	1.7E-01	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.5E-01
	Lead	862	mg/kg	862	mg/kg	M	3.9E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	685	mg/kg	685	mg/kg	M	3.1E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	2.2E-02
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	2.7E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	3.8E-02
	Zinc	1150	mg/kg	1150	mg/kg	M	5.1E-03	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.7E-02
	(Total)												1.0E+00
Dermal	Aluminum	18200	mg/kg	18200	mg/kg	M	9.1E-04	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	9.1E-04
	Antimony	3.2	mg/kg	3.2	mg/kg	M	1.6E-07	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	2.7E-03
	Arsenic	25	mg/kg	25	mg/kg	M	3.8E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.3E-02
	Barium	602	mg/kg	602	mg/kg	M	3.0E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.2E-03
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	4.1E-08	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-03
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	5.8E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.9E-03
	Iron	39100	mg/kg	39100	mg/kg	M	2.0E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.8E-03
	Lead	862	mg/kg	862	mg/kg	M	4.3E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	685	mg/kg	685	mg/kg	M	3.4E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	6.1E-03
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	3.0E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	1.7E-02
	Zinc	1150	mg/kg	1150	mg/kg	M	5.8E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.9E-04
	(Total)												4.7E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.1E+00

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1tt Adult Resident RME Soil at Property 30914
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	1.5E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.5E-02
	Antimony	9.5	mg/kg	9.5	mg/kg	M	1.3E-05	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	3.3E-02
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	1.3E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	4.2E-02
	Barium	584	mg/kg	584	mg/kg	M	8.0E-04	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.0E-03
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	1.6E-06	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	1.6E-03
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	7.3E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	2.4E-02
	Iron	21700	mg/kg	21700	mg/kg	M	3.0E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	4.2E-02
	Lead	1041	mg/kg	1041	mg/kg	M	1.4E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	515	mg/kg	515	mg/kg	M	7.1E-04	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	5.0E-03
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	4.3E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	6.1E-03
	Zinc	748	mg/kg	748	mg/kg	M	1.0E-03	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	3.4E-03
	(Total)												1.8E-01
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	6.0E-04	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	6.0E-04
	Antimony	9.5	mg/kg	9.5	mg/kg	M	5.2E-07	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	8.7E-03
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	1.5E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	5.1E-03
	Barium	584	mg/kg	584	mg/kg	M	3.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.3E-03
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	6.6E-09	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.6E-04
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	2.9E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	9.7E-04
	Iron	21700	mg/kg	21700	mg/kg	M	1.2E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.7E-03
	Lead	1041	mg/kg	1041	mg/kg	M	5.7E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	515	mg/kg	515	mg/kg	M	2.8E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	5.0E-03
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	1.7E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	9.5E-03
	Zinc	748	mg/kg	748	mg/kg	M	4.1E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.4E-04
	(Total)												3.4E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.1E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1tt Adult Resident CTE Soil at Property 30914
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	5.3E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	5.3E-03
	Antimony	9.5	mg/kg	9.5	mg/kg	M	4.6E-06	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	1.1E-02
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	4.5E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.5E-02
	Barium	584	mg/kg	584	mg/kg	M	2.8E-04	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.4E-03
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	5.8E-07	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	5.8E-04
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	2.5E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	8.5E-03
	Iron	21700	mg/kg	21700	mg/kg	M	1.0E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.5E-02
	Lead	1041	mg/kg	1041	mg/kg	M	5.0E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	515	mg/kg	515	mg/kg	M	2.5E-04	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	1.8E-03
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	1.5E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	2.1E-03
	Zinc	748	mg/kg	748	mg/kg	M	3.6E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.2E-03
	(Total)												6.2E-02
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	6.0E-05	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	6.0E-05
	Antimony	9.5	mg/kg	9.5	mg/kg	M	5.2E-08	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	8.7E-04
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	1.5E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	5.1E-04
	Barium	584	mg/kg	584	mg/kg	M	3.2E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.3E-04
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	6.6E-10	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.6E-05
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	2.9E-08	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	9.7E-05
	Iron	21700	mg/kg	21700	mg/kg	M	1.2E-04	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.7E-04
	Lead	1041	mg/kg	1041	mg/kg	M	5.7E-06	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	515	mg/kg	515	mg/kg	M	2.8E-06	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	5.0E-04
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	1.7E-07	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	9.5E-04
	Zinc	748	mg/kg	748	mg/kg	M	4.1E-06	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.4E-05
	(Total)												3.4E-03
												Total Hazard Index Across All Exposure Routes/Pathways	6.5E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1tt Child Resident RME Soil at Property 30914
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	1.4E-01	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.4E-01
	Antimony	9.5	mg/kg	9.5	mg/kg	M	1.2E-04	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	3.0E-01
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	1.2E-04	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	4.0E-01
	Barium	584	mg/kg	584	mg/kg	M	7.5E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.7E-02
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	1.5E-05	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	1.5E-02
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	6.8E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	2.3E-01
	Iron	21700	mg/kg	21700	mg/kg	M	2.8E-01	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	4.0E-01
	Lead	1041	mg/kg	1041	mg/kg	M	1.3E-02	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	515	mg/kg	515	mg/kg	M	6.6E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	4.7E-02
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	4.0E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	5.7E-02
	Zinc	748	mg/kg	748	mg/kg	M	9.6E-03	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	3.2E-02
	(Total)												1.7E+00
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	3.9E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	3.9E-03
	Antimony	9.5	mg/kg	9.5	mg/kg	M	3.4E-06	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	5.7E-02
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	1.0E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	3.3E-02
	Barium	584	mg/kg	584	mg/kg	M	2.1E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.5E-02
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	4.3E-08	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.7E-03
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	1.9E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	6.3E-03
	Iron	21700	mg/kg	21700	mg/kg	M	7.8E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.1E-02
	Lead	1041	mg/kg	1041	mg/kg	M	3.7E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	515	mg/kg	515	mg/kg	M	1.8E-04	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	3.3E-02
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	1.1E-05	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	6.2E-02
	Zinc	748	mg/kg	748	mg/kg	M	2.7E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	8.9E-04
	(Total)												2.2E-01
												Total Hazard Index Across All Exposure Routes/Pathways	1.9E+00

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1tt Child Resident CTE Soil at Property 30914
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	4.9E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	4.9E-02
	Antimony	9.5	mg/kg	9.5	mg/kg	M	4.3E-05	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	1.1E-01
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	4.2E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.4E-01
	Barium	584	mg/kg	584	mg/kg	M	2.6E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.3E-02
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	5.4E-06	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	5.4E-03
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	2.4E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	7.9E-02
	Iron	21700	mg/kg	21700	mg/kg	M	9.7E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.4E-01
	Lead	1041	mg/kg	1041	mg/kg	M	4.7E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	515	mg/kg	515	mg/kg	M	2.3E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	1.6E-02
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	1.4E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	2.0E-02
	Zinc	748	mg/kg	748	mg/kg	M	3.3E-03	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.1E-02
	(Total)												5.8E-01
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	5.5E-04	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	5.5E-04
	Antimony	9.5	mg/kg	9.5	mg/kg	M	4.8E-07	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	7.9E-03
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	1.4E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	4.7E-03
	Barium	584	mg/kg	584	mg/kg	M	2.9E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.1E-03
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	6.0E-09	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.4E-04
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	2.7E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	8.9E-04
	Iron	21700	mg/kg	21700	mg/kg	M	1.1E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.6E-03
	Lead	1041	mg/kg	1041	mg/kg	M	5.2E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	515	mg/kg	515	mg/kg	M	2.6E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	4.6E-03
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	1.6E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	8.7E-03
	Zinc	748	mg/kg	748	mg/kg	M	3.7E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.2E-04
	(Total)												3.1E-02
												Total Hazard Index Across All Exposure Routes/Pathways	6.1E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1uu Adult Resident RME Soil at Property 30965
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	306	mg/kg	306	mg/kg	M	4.2E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	306	mg/kg	306	mg/kg	M	1.7E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1uu Adult Resident CTE Soil at Property 30965
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	306	mg/kg	306	mg/kg	M	1.5E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	306	mg/kg	306	mg/kg	M	1.7E-06	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1uu Child Resident RME Soil at Property 30965
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	306	mg/kg	306	mg/kg	M	3.9E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	306	mg/kg	306	mg/kg	M	1.1E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1uu Child Resident CTE Soil at Property 30965
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	306	mg/kg	306	mg/kg	M	1.4E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	NC
	Lead	306	mg/kg	306	mg/kg	M	1.5E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	NC
	(Total)												NC
												Total Hazard Index Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1vv Adult Resident RME Soil at Property 31016
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	1.5E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.5E-02
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	1240	mg/kg	1240	mg/kg	M	1.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.5E-03
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	1.4E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	4.8E-02
	Iron	13300	mg/kg	13300	mg/kg	M	1.8E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.6E-02
	Lead	372	mg/kg	372	mg/kg	M	5.1E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	988	mg/kg	988	mg/kg	M	1.4E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	9.7E-03
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	3.6E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	5.1E-03
	Zinc	59.4	mg/kg	59.4	mg/kg	M	8.1E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	2.7E-04
	(Total)												1.1E-01
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	5.9E-04	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	5.9E-04
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	1240	mg/kg	1240	mg/kg	M	6.8E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.8E-03
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	5.7E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.9E-03
	Iron	13300	mg/kg	13300	mg/kg	M	7.3E-04	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.0E-03
	Lead	372	mg/kg	372	mg/kg	M	2.0E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	988	mg/kg	988	mg/kg	M	5.4E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	9.6E-03
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	1.4E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	8.0E-03
	Zinc	59.4	mg/kg	59.4	mg/kg	M	3.2E-06	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.1E-05
	(Total)												2.6E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.4E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1vv Adult Resident CTE Soil at Property 31016
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	5.2E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	5.2E-03
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	1240	mg/kg	1240	mg/kg	M	5.9E-04	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.0E-03
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	5.0E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.7E-02
	Iron	13300	mg/kg	13300	mg/kg	M	6.4E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	9.1E-03
	Lead	372	mg/kg	372	mg/kg	M	1.8E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	988	mg/kg	988	mg/kg	M	4.7E-04	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	3.4E-03
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	1.3E-05	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	1.8E-03
	Zinc	59.4	mg/kg	59.4	mg/kg	M	2.8E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	9.5E-05
	(Total)												3.9E-02
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	5.9E-05	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	5.9E-05
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	1240	mg/kg	1240	mg/kg	M	6.8E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.8E-04
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	5.7E-08	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.9E-04
	Iron	13300	mg/kg	13300	mg/kg	M	7.3E-05	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	1.0E-04
	Lead	372	mg/kg	372	mg/kg	M	2.0E-06	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	988	mg/kg	988	mg/kg	M	5.4E-06	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	9.6E-04
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	1.4E-07	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	8.0E-04
	Zinc	59.4	mg/kg	59.4	mg/kg	M	3.2E-07	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	1.1E-06
	(Total)												2.6E-03
												Total Hazard Index Across All Exposure Routes/Pathways	4.2E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1vv Child Resident RME Soil at Property 31016
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	1.4E-01	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	1.4E-01
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	1240	mg/kg	1240	mg/kg	M	1.6E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	7.9E-02
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	1.3E-04	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	4.5E-01
	Iron	13300	mg/kg	13300	mg/kg	M	1.7E-01	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	2.4E-01
	Lead	372	mg/kg	372	mg/kg	M	4.8E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	988	mg/kg	988	mg/kg	M	1.3E-02	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	9.0E-02
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	3.3E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	4.8E-02
	Zinc	59.4	mg/kg	59.4	mg/kg	M	7.6E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	2.5E-03
	(Total)												1.0E+00
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	3.9E-03	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	3.9E-03
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	1240	mg/kg	1240	mg/kg	M	4.4E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.2E-02
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	3.8E-06	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.3E-02
	Iron	13300	mg/kg	13300	mg/kg	M	4.8E-03	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	6.8E-03
	Lead	372	mg/kg	372	mg/kg	M	1.3E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	988	mg/kg	988	mg/kg	M	3.5E-04	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	6.3E-02
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	9.4E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	5.2E-02
	Zinc	59.4	mg/kg	59.4	mg/kg	M	2.1E-05	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	7.1E-05
	(Total)												1.7E-01
												Total Hazard Index Across All Exposure Routes/Pathways	1.2E+00

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.1vv Child Resident CTE Soil at Property 31016
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	4.8E-02	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	4.8E-02
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	4.0E-04	mg/kg-day	NA	NA	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	1240	mg/kg	1240	mg/kg	M	5.5E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.8E-02
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.0E-03	mg/kg-day	NA	NA	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	4.7E-05	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.6E-01
	Iron	13300	mg/kg	13300	mg/kg	M	6.0E-02	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	8.5E-02
	Lead	372	mg/kg	372	mg/kg	M	1.7E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	988	mg/kg	988	mg/kg	M	4.4E-03	mg/kg-day	1.4E-01	mg/kg-day	NA	NA	3.2E-02
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	1.2E-04	mg/kg-day	7.0E-03	mg/kg-day	NA	NA	1.7E-02
	Zinc	59.4	mg/kg	59.4	mg/kg	M	2.7E-04	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	8.9E-04
	(Total)												3.7E-01
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	5.4E-04	mg/kg-day	1.0E+00	mg/kg-day	NA	NA	5.4E-04
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	6.0E-05	mg/kg-day	NA	NA	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	NC
	Barium	1240	mg/kg	1240	mg/kg	M	6.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.4E-03
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	5.3E-07	mg/kg-day	3.0E-04	mg/kg-day	NA	NA	1.8E-03
	Iron	13300	mg/kg	13300	mg/kg	M	6.7E-04	mg/kg-day	7.0E-01	mg/kg-day	NA	NA	9.5E-04
	Lead	372	mg/kg	372	mg/kg	M	1.9E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	Manganese	988	mg/kg	988	mg/kg	M	5.0E-05	mg/kg-day	5.6E-03	mg/kg-day	NA	NA	8.8E-03
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	1.3E-06	mg/kg-day	1.8E-04	mg/kg-day	NA	NA	7.3E-03
	Zinc	59.4	mg/kg	59.4	mg/kg	M	3.0E-06	mg/kg-day	3.0E-01	mg/kg-day	NA	NA	9.9E-06
	(Total)												2.4E-02
												Total Hazard Index Across All Exposure Routes/Pathways	3.9E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 7.2a Adult Resident RME Groundwater at Property 8
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	78	µg/L	78	µg/L	M	2.1E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.1E-02
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	1.2	µg/L	1.2	µg/L	M	3.3E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.3E-01
Dermal	Barium	78	µg/L	78	µg/L	M	1.1E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	8.0E-04
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	1.2	µg/L	1.2	µg/L	M	1.7E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.4E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.5E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2a Adult Resident CTE Groundwater at Property 8
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	78	µg/L	78	µg/L	M	1.0E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.2E-03
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	1.2	µg/L	1.2	µg/L	M	1.6E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.1E-01
Dermal	Barium	78	µg/L	78	µg/L	M	3.4E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.4E-04
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	1.2	µg/L	1.2	µg/L	M	5.2E-09	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.1E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2a Child Resident RME Groundwater at Property 8
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	78	µg/L	78	µg/L	M	5.5E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.7E-02
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	1.2	µg/L	1.2	µg/L	M	8.4E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.9E-01
Dermal	Barium	78	µg/L	78	µg/L	M	3.3E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.4E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	1.2	µg/L	1.2	µg/L	M	5.1E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.0E-02
												Total Hazard Index Across All Exposure Routes/Pathways	6.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2a Child Resident CTE Groundwater at Property 8
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	78	µg/L	78	µg/L	M	1.4E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	7.0E-03
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	1.2	µg/L	1.2	µg/L	M	2.1E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-01
Dermal	Barium	78	µg/L	78	µg/L	M	7.6E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.4E-04
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	1.2	µg/L	1.2	µg/L	M	1.2E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.6E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2b Adult Resident RME Groundwater at Property 69
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	827	µg/L	827	µg/L	M	2.3E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.1E-01
	Cadmium	6	µg/L	6	µg/L	M	1.6E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	3.3E-01
	Lead	8.8	µg/L	8.8	µg/L	M	2.4E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												4.4E-01
Dermal	Barium	827	µg/L	827	µg/L	M	1.2E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	8.4E-03
	Cadmium	6	µg/L	6	µg/L	M	8.6E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	3.4E-02
	Lead	8.8	µg/L	8.8	µg/L	M	1.3E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												4.3E-02
												Total Hazard Index Across All Exposure Routes/Pathways	4.8E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2b Adult Resident CTE Groundwater at Property 69
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	827	µg/L	827	µg/L	M	1.1E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.6E-02
	Cadmium	6	µg/L	6	µg/L	M	8.1E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.6E-01
	Lead	8.8	µg/L	8.8	µg/L	M	1.2E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.2E-01
Dermal	Barium	827	µg/L	827	µg/L	M	3.6E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.5E-03
	Cadmium	6	µg/L	6	µg/L	M	2.6E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.0E-02
	Lead	8.8	µg/L	8.8	µg/L	M	3.8E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.3E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.3E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2b Child Resident RME Groundwater at Property 69
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	827	µg/L	827	µg/L	M	5.8E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.9E-01
	Cadmium	6	µg/L	6	µg/L	M	4.2E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	8.4E-01
	Lead	8.8	µg/L	8.8	µg/L	M	6.2E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.1E+00
Dermal	Barium	827	µg/L	827	µg/L	M	3.5E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.5E-02
	Cadmium	6	µg/L	6	µg/L	M	2.5E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.0E-01
	Lead	8.8	µg/L	8.8	µg/L	M	3.7E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.3E-01
												Total Hazard Index Across All Exposure Routes/Pathways	1.3E+00

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2b Child Resident CTE Groundwater at Property 69
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	827	µg/L	827	µg/L	M	1.5E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	7.4E-02
	Cadmium	6	µg/L	6	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.1E-01
	Lead	8.8	µg/L	8.8	µg/L	M	1.6E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.9E-01
Dermal	Barium	827	µg/L	827	µg/L	M	8.1E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.8E-03
	Cadmium	6	µg/L	6	µg/L	M	5.8E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	8.8	µg/L	8.8	µg/L	M	8.6E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.9E-02
												Total Hazard Index Across All Exposure Routes/Pathways	3.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2c Adult Resident RME Groundwater at Property 438
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	80	µg/L	80	µg/L	M	2.2E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.1E-02
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.3E-01
Dermal	Barium	80	µg/L	80	µg/L	M	1.1E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	8.2E-04
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.4E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.5E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2c Adult Resident CTE Groundwater at Property 438
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	80	µg/L	80	µg/L	M	1.1E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.4E-03
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.1E-01
Dermal	Barium	80	µg/L	80	µg/L	M	3.5E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.5E-04
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.2E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2c Child Resident RME Groundwater at Property 438
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	80	µg/L	80	µg/L	M	5.6E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.8E-02
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.9E-01
Dermal	Barium	80	µg/L	80	µg/L	M	3.4E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.4E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.0E-02
												Total Hazard Index Across All Exposure Routes/Pathways	6.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2c Child Resident CTE Groundwater at Property 438
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	80	µg/L	80	µg/L	M	1.4E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	7.2E-03
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-01
Dermal	Barium	80	µg/L	80	µg/L	M	7.8E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.6E-04
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.6E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2d Adult Resident RME Groundwater at Property 1612
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	129	µg/L	129	µg/L	M	3.5E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.8E-02
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.4E-01
Dermal	Barium	129	µg/L	129	µg/L	M	1.8E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.3E-03
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.4E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2d Adult Resident CTE Groundwater at Property 1612
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	129	µg/L	129	µg/L	M	1.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.7E-03
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.2E-01
Dermal	Barium	129	µg/L	129	µg/L	M	5.6E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.0E-04
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.3E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2d Child Resident RME Groundwater at Property 1612
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	129	µg/L	129	µg/L	M	9.1E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.5E-02
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												6.1E-01
Dermal	Barium	129	µg/L	129	µg/L	M	5.4E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.9E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.1E-02
												Total Hazard Index Across All Exposure Routes/Pathways	6.8E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2d Child Resident CTE Groundwater at Property 1612
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	129	µg/L	129	µg/L	M	2.3E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.2E-02
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-01
Dermal	Barium	129	µg/L	129	µg/L	M	1.3E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	9.0E-04
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.6E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2e Adult Resident RME Groundwater at Property 1653
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1653
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	595	µg/L	595	µg/L	M	1.6E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.2E-02
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	28	µg/L	28	µg/L	M	7.7E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.0E-01
Dermal	Barium	595	µg/L	595	µg/L	M	8.5E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	6.1E-03
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	28	µg/L	28	µg/L	M	4.0E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.9E-02
												Total Hazard Index Across All Exposure Routes/Pathways	3.3E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2e Adult Resident CTE Groundwater at Property 1653
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1653
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	595	µg/L	595	µg/L	M	8.0E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.0E-02
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	28	µg/L	28	µg/L	M	3.8E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-01
Dermal	Barium	595	µg/L	595	µg/L	M	2.6E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.8E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	28	µg/L	28	µg/L	M	1.2E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.7E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2e Child Resident RME Groundwater at Property 1653
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1653
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	595	µg/L	595	µg/L	M	4.2E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.1E-01
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	28	µg/L	28	µg/L	M	2.0E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.7E-01
Dermal	Barium	595	µg/L	595	µg/L	M	2.5E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.8E-02
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	28	µg/L	28	µg/L	M	1.2E-06	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.5E-02
												Total Hazard Index Across All Exposure Routes/Pathways	8.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2e Child Resident CTE Groundwater at Property 1653
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1653
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	595	µg/L	595	µg/L	M	1.1E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.3E-02
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	28	µg/L	28	µg/L	M	5.0E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.0E-01
Dermal	Barium	595	µg/L	595	µg/L	M	5.8E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.1E-03
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	28	µg/L	28	µg/L	M	2.7E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.0E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2f Adult Resident RME Groundwater at Property 5007
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	126	µg/L	126	µg/L	M	3.5E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.7E-02
	Cadmium	3	µg/L	3	µg/L	M	8.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.6E-01
	Lead	2.2	µg/L	2.2	µg/L	M	6.0E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.8E-01
Dermal	Barium	126	µg/L	126	µg/L	M	1.8E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.3E-03
	Cadmium	3	µg/L	3	µg/L	M	4.3E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.7E-02
	Lead	2.2	µg/L	2.2	µg/L	M	3.1E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.8E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.0E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2f Adult Resident CTE Groundwater at Property 5007
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	126	µg/L	126	µg/L	M	1.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.5E-03
	Cadmium	3	µg/L	3	µg/L	M	4.0E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	8.1E-02
	Lead	2.2	µg/L	2.2	µg/L	M	3.0E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.9E-02
Dermal	Barium	126	µg/L	126	µg/L	M	5.4E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.9E-04
	Cadmium	3	µg/L	3	µg/L	M	1.3E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	5.2E-03
	Lead	2.2	µg/L	2.2	µg/L	M	9.5E-09	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.6E-03
												Total Hazard Index Across All Exposure Routes/Pathways	9.5E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2f Child Resident RME Groundwater at Property 5007
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	126	µg/L	126	µg/L	M	8.9E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.4E-02
	Cadmium	3	µg/L	3	µg/L	M	2.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	4.2E-01
	Lead	2.2	µg/L	2.2	µg/L	M	1.5E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												4.7E-01
Dermal	Barium	126	µg/L	126	µg/L	M	5.3E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.8E-03
	Cadmium	3	µg/L	3	µg/L	M	1.3E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	5.1E-02
	Lead	2.2	µg/L	2.2	µg/L	M	9.3E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.4E-02
												Total Hazard Index Across All Exposure Routes/Pathways	5.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2f Child Resident CTE Groundwater at Property 5007
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	126	µg/L	126	µg/L	M	2.3E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.1E-02
	Cadmium	3	µg/L	3	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	2.2	µg/L	2.2	µg/L	M	3.9E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.2E-01
Dermal	Barium	126	µg/L	126	µg/L	M	1.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	8.8E-04
	Cadmium	3	µg/L	3	µg/L	M	2.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.2E-02
	Lead	2.2	µg/L	2.2	µg/L	M	2.1E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.3E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.3E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2g Adult Resident RME Groundwater at Property 5008
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	494	µg/L	494	µg/L	M	1.4E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	6.8E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	3.1	µg/L	3.1	µg/L	M	8.5E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												6.8E-02
Dermal	Barium	494	µg/L	494	µg/L	M	7.1E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.0E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	3.1	µg/L	3.1	µg/L	M	4.4E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.0E-03
												Total Hazard Index Across All Exposure Routes/Pathways	7.3E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2g Adult Resident CTE Groundwater at Property 5008
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	494	µg/L	494	µg/L	M	6.6E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.3E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	3.1	µg/L	3.1	µg/L	M	4.2E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.3E-02
Dermal	Barium	494	µg/L	494	µg/L	M	2.1E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.5E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	3.1	µg/L	3.1	µg/L	M	1.3E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-03
												Total Hazard Index Across All Exposure Routes/Pathways	3.5E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2g Child Resident RME Groundwater at Property 5008
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	494	µg/L	494	µg/L	M	3.5E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.7E-01
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	3.1	µg/L	3.1	µg/L	M	2.2E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.7E-01
Dermal	Barium	494	µg/L	494	µg/L	M	2.1E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.5E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	3.1	µg/L	3.1	µg/L	M	1.3E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.9E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2g Child Resident CTE Groundwater at Property 5008
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	494	µg/L	494	µg/L	M	8.8E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.4E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	3.1	µg/L	3.1	µg/L	M	5.5E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												4.4E-02
Dermal	Barium	494	µg/L	494	µg/L	M	4.8E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.4E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	3.1	µg/L	3.1	µg/L	M	3.0E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.4E-03
												Total Hazard Index Across All Exposure Routes/Pathways	4.8E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2h Adult Resident RME Groundwater at Property 5014
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	170	µg/L	170	µg/L	M	4.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.3E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.3E-02
Dermal	Barium	170	µg/L	170	µg/L	M	2.4E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.7E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.7E-03
												Total Hazard Index Across All Exposure Routes/Pathways	2.5E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2h Adult Resident CTE Groundwater at Property 5014
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	170	µg/L	170	µg/L	M	2.3E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.1E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.1E-02
Dermal	Barium	170	µg/L	170	µg/L	M	7.3E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.2E-04
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.2E-04
												Total Hazard Index Across All Exposure Routes/Pathways	1.2E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2h Child Resident RME Groundwater at Property 5014
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	170	µg/L	170	µg/L	M	1.2E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	6.0E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												6.0E-02
Dermal	Barium	170	µg/L	170	µg/L	M	7.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.1E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.1E-03
												Total Hazard Index Across All Exposure Routes/Pathways	6.5E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2h Child Resident CTE Groundwater at Property 5014
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	170	µg/L	170	µg/L	M	3.0E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.5E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-02
Dermal	Barium	170	µg/L	170	µg/L	M	1.7E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.2E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.2E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.6E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2i Adult Resident RME Groundwater at Property 20008
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	500	µg/L	500	µg/L	M	1.4E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	6.8E-02
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	14.9	µg/L	14.9	µg/L	M	4.1E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.9E-01
Dermal	Barium	500	µg/L	500	µg/L	M	7.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.1E-03
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	14.9	µg/L	14.9	µg/L	M	2.1E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.8E-02
												Total Hazard Index Across All Exposure Routes/Pathways	3.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2i Adult Resident CTE Groundwater at Property 20008
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	500	µg/L	500	µg/L	M	6.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.4E-02
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	14.9	µg/L	14.9	µg/L	M	2.0E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.4E-01
Dermal	Barium	500	µg/L	500	µg/L	M	2.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.5E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	14.9	µg/L	14.9	µg/L	M	6.4E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.4E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.5E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2i Child Resident RME Groundwater at Property 20008
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	500	µg/L	500	µg/L	M	3.5E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.8E-01
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	14.9	µg/L	14.9	µg/L	M	1.0E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.4E-01
Dermal	Barium	500	µg/L	500	µg/L	M	2.1E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.5E-02
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	14.9	µg/L	14.9	µg/L	M	6.3E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.3E-02
												Total Hazard Index Across All Exposure Routes/Pathways	8.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2i Child Resident CTE Groundwater at Property 20008
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	500	µg/L	500	µg/L	M	8.9E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.5E-02
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	14.9	µg/L	14.9	µg/L	M	2.7E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.9E-01
Dermal	Barium	500	µg/L	500	µg/L	M	4.9E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.5E-03
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	14.9	µg/L	14.9	µg/L	M	1.5E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.9E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.1E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2j Adult Resident RME Groundwater at Property 20027
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	554	µg/L	554	µg/L	M	1.5E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	7.6E-02
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.0E-01
Dermal	Barium	554	µg/L	554	µg/L	M	7.9E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.7E-03
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.9E-02
												Total Hazard Index Across All Exposure Routes/Pathways	3.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2j Adult Resident CTE Groundwater at Property 20027
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	554	µg/L	554	µg/L	M	7.4E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.7E-02
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.4E-01
Dermal	Barium	554	µg/L	554	µg/L	M	2.4E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.7E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.6E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.5E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2j Child Resident RME Groundwater at Property 20027
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	554	µg/L	554	µg/L	M	3.9E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.9E-01
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.6E-01
Dermal	Barium	554	µg/L	554	µg/L	M	2.3E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.7E-02
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.4E-02
												Total Hazard Index Across All Exposure Routes/Pathways	8.4E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2j Child Resident CTE Groundwater at Property 20027
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	554	µg/L	554	µg/L	M	9.9E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.0E-02
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.9E-01
Dermal	Barium	554	µg/L	554	µg/L	M	5.4E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.9E-03
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.9E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.1E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2k Adult Resident RME Groundwater at Property 20437
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	641	µg/L	641	µg/L	M	1.8E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.8E-02
	Cadmium	5	µg/L	5	µg/L	M	1.4E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.7E-01
	Lead	6.8	µg/L	6.8	µg/L	M	1.9E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.6E-01
Dermal	Barium	641	µg/L	641	µg/L	M	9.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	6.5E-03
	Cadmium	5	µg/L	5	µg/L	M	7.2E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.9E-02
	Lead	6.8	µg/L	6.8	µg/L	M	9.7E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.5E-02
												Total Hazard Index Across All Exposure Routes/Pathways	4.0E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2k Adult Resident CTE Groundwater at Property 20437
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	641	µg/L	641	µg/L	M	8.6E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.3E-02
	Cadmium	5	µg/L	5	µg/L	M	6.7E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.3E-01
	Lead	6.8	µg/L	6.8	µg/L	M	9.1E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.8E-01
Dermal	Barium	641	µg/L	641	µg/L	M	2.8E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.0E-03
	Cadmium	5	µg/L	5	µg/L	M	2.2E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	8.6E-03
	Lead	6.8	µg/L	6.8	µg/L	M	2.9E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.1E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.9E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2k Child Resident RME Groundwater at Property 20437
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	641	µg/L	641	µg/L	M	4.5E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.3E-01
	Cadmium	5	µg/L	5	µg/L	M	3.5E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	7.0E-01
	Lead	6.8	µg/L	6.8	µg/L	M	4.8E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												9.3E-01
Dermal	Barium	641	µg/L	641	µg/L	M	2.7E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.9E-02
	Cadmium	5	µg/L	5	µg/L	M	2.1E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	8.4E-02
	Lead	6.8	µg/L	6.8	µg/L	M	2.9E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.0E-01
												Total Hazard Index Across All Exposure Routes/Pathways	1.0E+00

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2k Child Resident CTE Groundwater at Property 20437
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	641	µg/L	641	µg/L	M	1.1E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.7E-02
	Cadmium	5	µg/L	5	µg/L	M	8.9E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.8E-01
	Lead	6.8	µg/L	6.8	µg/L	M	1.2E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.4E-01
Dermal	Barium	641	µg/L	641	µg/L	M	6.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.5E-03
	Cadmium	5	µg/L	5	µg/L	M	4.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.9E-02
	Lead	6.8	µg/L	6.8	µg/L	M	6.6E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.4E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2l Adult Resident RME Groundwater at Property 20767
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	607	µg/L	607	µg/L	M	1.7E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.3E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.3E-02
Dermal	Barium	607	µg/L	607	µg/L	M	8.7E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	6.2E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												6.2E-03
												Total Hazard Index Across All Exposure Routes/Pathways	8.9E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2l Adult Resident CTE Groundwater at Property 20767
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	607	µg/L	607	µg/L	M	8.1E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.1E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												4.1E-02
Dermal	Barium	607	µg/L	607	µg/L	M	2.6E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.9E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.9E-03
												Total Hazard Index Across All Exposure Routes/Pathways	4.3E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2l Child Resident RME Groundwater at Property 20767
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	607	µg/L	607	µg/L	M	4.3E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.1E-01
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.1E-01
Dermal	Barium	607	µg/L	607	µg/L	M	2.6E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.8E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.8E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.3E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2I Child Resident CTE Groundwater at Property 20767
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	607	µg/L	607	µg/L	M	1.1E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.4E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.4E-02
Dermal	Barium	607	µg/L	607	µg/L	M	5.9E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.2E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												4.2E-03
												Total Hazard Index Across All Exposure Routes/Pathways	5.9E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2m Adult Resident RME Groundwater at Property 23264
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	85	µg/L	85	µg/L	M	2.3E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.2E-02
	Cadmium	3	µg/L	3	µg/L	M	8.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.6E-01
	Lead	5.7	µg/L	5.7	µg/L	M	1.6E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.8E-01
Dermal	Barium	85	µg/L	85	µg/L	M	1.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	8.7E-04
	Cadmium	3	µg/L	3	µg/L	M	4.3E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.7E-02
	Lead	5.7	µg/L	5.7	µg/L	M	8.2E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.8E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.9E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2m Adult Resident CTE Groundwater at Property 23264
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	85	µg/L	85	µg/L	M	1.1E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.7E-03
	Cadmium	3	µg/L	3	µg/L	M	4.0E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	8.1E-02
	Lead	5.7	µg/L	5.7	µg/L	M	7.7E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.6E-02
Dermal	Barium	85	µg/L	85	µg/L	M	3.7E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.6E-04
	Cadmium	3	µg/L	3	µg/L	M	1.3E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	5.2E-03
	Lead	5.7	µg/L	5.7	µg/L	M	2.5E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.4E-03
												Total Hazard Index Across All Exposure Routes/Pathways	9.2E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2m Child Resident RME Groundwater at Property 23264
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	85	µg/L	85	µg/L	M	6.0E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.0E-02
	Cadmium	3	µg/L	3	µg/L	M	2.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	4.2E-01
	Lead	5.7	µg/L	5.7	µg/L	M	4.0E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												4.5E-01
Dermal	Barium	85	µg/L	85	µg/L	M	3.6E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.6E-03
	Cadmium	3	µg/L	3	µg/L	M	1.3E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	5.1E-02
	Lead	5.7	µg/L	5.7	µg/L	M	2.4E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.3E-02
												Total Hazard Index Across All Exposure Routes/Pathways	5.0E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2m Child Resident CTE Groundwater at Property 23264
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	85	µg/L	85	µg/L	M	1.5E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	7.6E-03
	Cadmium	3	µg/L	3	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	5.7	µg/L	5.7	µg/L	M	1.0E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.2E-01
Dermal	Barium	85	µg/L	85	µg/L	M	8.3E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.9E-04
	Cadmium	3	µg/L	3	µg/L	M	2.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.2E-02
	Lead	5.7	µg/L	5.7	µg/L	M	5.6E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.2E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.3E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2n Adult Resident RME Groundwater at Property 23378
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	84	µg/L	84	µg/L	M	2.3E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.2E-02
	Cadmium	3	µg/L	3	µg/L	M	8.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.6E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.8E-01
Dermal	Barium	84	µg/L	84	µg/L	M	1.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	8.6E-04
	Cadmium	3	µg/L	3	µg/L	M	4.3E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.7E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.8E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.9E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2n Adult Resident CTE Groundwater at Property 23378
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	84	µg/L	84	µg/L	M	1.1E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.6E-03
	Cadmium	3	µg/L	3	µg/L	M	4.0E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	8.1E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.6E-02
Dermal	Barium	84	µg/L	84	µg/L	M	3.6E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.6E-04
	Cadmium	3	µg/L	3	µg/L	M	1.3E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	5.2E-03
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.4E-03
												Total Hazard Index Across All Exposure Routes/Pathways	9.2E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2n Child Resident RME Groundwater at Property 23378
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	84	µg/L	84	µg/L	M	5.9E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.0E-02
	Cadmium	3	µg/L	3	µg/L	M	2.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	4.2E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												4.5E-01
Dermal	Barium	84	µg/L	84	µg/L	M	3.5E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.5E-03
	Cadmium	3	µg/L	3	µg/L	M	1.3E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	5.1E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.3E-02
												Total Hazard Index Across All Exposure Routes/Pathways	5.0E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2n Child Resident CTE Groundwater at Property 23378
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	84	µg/L	84	µg/L	M	1.5E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	7.5E-03
	Cadmium	3	µg/L	3	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.1E-01
Dermal	Barium	84	µg/L	84	µg/L	M	8.2E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.8E-04
	Cadmium	3	µg/L	3	µg/L	M	2.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.2E-02
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.2E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.3E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2o Adult Resident RME Groundwater at Property 23575
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	235	µg/L	235	µg/L	M	6.4E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.2E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	12	µg/L	12	µg/L	M	3.3E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.2E-02
Dermal	Barium	235	µg/L	235	µg/L	M	3.4E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.4E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	12	µg/L	12	µg/L	M	1.7E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.4E-03
												Total Hazard Index Across All Exposure Routes/Pathways	3.5E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2o Adult Resident CTE Groundwater at Property 23575
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	235	µg/L	235	µg/L	M	3.2E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.6E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	12	µg/L	12	µg/L	M	1.6E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.6E-02
Dermal	Barium	235	µg/L	235	µg/L	M	1.0E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	7.2E-04
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	12	µg/L	12	µg/L	M	5.2E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.2E-04
												Total Hazard Index Across All Exposure Routes/Pathways	1.6E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2o Child Resident RME Groundwater at Property 23575
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	235	µg/L	235	µg/L	M	1.7E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.3E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	12	µg/L	12	µg/L	M	8.4E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.3E-02
Dermal	Barium	235	µg/L	235	µg/L	M	9.9E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	7.1E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	12	µg/L	12	µg/L	M	5.1E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.1E-03
												Total Hazard Index Across All Exposure Routes/Pathways	9.0E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2o Child Resident CTE Groundwater at Property 23575
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	235	µg/L	235	µg/L	M	4.2E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.1E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	12	µg/L	12	µg/L	M	2.1E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.1E-02
Dermal	Barium	235	µg/L	235	µg/L	M	2.3E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.6E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	12	µg/L	12	µg/L	M	1.2E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.6E-03
												Total Hazard Index Across All Exposure Routes/Pathways	2.3E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2p Adult Resident RME Groundwater at Property 30079
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	1230	µg/L	1230	µg/L	M	3.4E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.7E-01
	Cadmium	3	µg/L	3	µg/L	M	8.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.6E-01
	Lead	1.3	µg/L	1.3	µg/L	M	3.6E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.3E-01
Dermal	Barium	1230	µg/L	1230	µg/L	M	1.8E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.3E-02
	Cadmium	3	µg/L	3	µg/L	M	4.3E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.7E-02
	Lead	1.3	µg/L	1.3	µg/L	M	1.9E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.0E-02
												Total Hazard Index Across All Exposure Routes/Pathways	3.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2p Adult Resident CTE Groundwater at Property 30079
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	1230	µg/L	1230	µg/L	M	1.7E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.3E-02
	Cadmium	3	µg/L	3	µg/L	M	4.0E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	8.1E-02
	Lead	1.3	µg/L	1.3	µg/L	M	1.7E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.6E-01
Dermal	Barium	1230	µg/L	1230	µg/L	M	5.3E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.8E-03
	Cadmium	3	µg/L	3	µg/L	M	1.3E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	5.2E-03
	Lead	1.3	µg/L	1.3	µg/L	M	5.6E-09	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												9.0E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2p Child Resident RME Groundwater at Property 30079
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	1230	µg/L	1230	µg/L	M	8.6E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.3E-01
	Cadmium	3	µg/L	3	µg/L	M	2.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	4.2E-01
	Lead	1.3	µg/L	1.3	µg/L	M	9.1E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.5E-01
Dermal	Barium	1230	µg/L	1230	µg/L	M	5.2E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.7E-02
	Cadmium	3	µg/L	3	µg/L	M	1.3E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	5.1E-02
	Lead	1.3	µg/L	1.3	µg/L	M	5.5E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.8E-02
												Total Hazard Index Across All Exposure Routes/Pathways	9.4E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2p Child Resident CTE Groundwater at Property 30079
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	1230	µg/L	1230	µg/L	M	2.2E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.1E-01
	Cadmium	3	µg/L	3	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	1.3	µg/L	1.3	µg/L	M	2.3E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.2E-01
Dermal	Barium	1230	µg/L	1230	µg/L	M	1.2E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	8.6E-03
	Cadmium	3	µg/L	3	µg/L	M	2.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.2E-02
	Lead	1.3	µg/L	1.3	µg/L	M	1.3E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.0E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.4E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2q Adult Resident RME Groundwater at Property 30182
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	962	µg/L	962	µg/L	M	2.6E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.3E-01
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	6.7	µg/L	6.7	µg/L	M	1.8E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.5E-01
Dermal	Barium	962	µg/L	962	µg/L	M	1.4E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	9.8E-03
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	6.7	µg/L	6.7	µg/L	M	9.6E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.3E-02
												Total Hazard Index Across All Exposure Routes/Pathways	3.8E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2q Adult Resident CTE Groundwater at Property 30182
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	962	µg/L	962	µg/L	M	1.3E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	6.5E-02
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	6.7	µg/L	6.7	µg/L	M	9.0E-05	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.7E-01
Dermal	Barium	962	µg/L	962	µg/L	M	4.2E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.0E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	6.7	µg/L	6.7	µg/L	M	2.9E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												9.9E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.8E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2q Child Resident RME Groundwater at Property 30182
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	962	µg/L	962	µg/L	M	6.8E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.4E-01
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	6.7	µg/L	6.7	µg/L	M	4.7E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												9.0E-01
Dermal	Barium	962	µg/L	962	µg/L	M	4.1E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.9E-02
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	6.7	µg/L	6.7	µg/L	M	2.8E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												9.6E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.0E+00

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2q Child Resident CTE Groundwater at Property 30182
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	962	µg/L	962	µg/L	M	1.7E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.6E-02
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	6.7	µg/L	6.7	µg/L	M	1.2E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.3E-01
Dermal	Barium	962	µg/L	962	µg/L	M	9.4E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	6.7E-03
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	6.7	µg/L	6.7	µg/L	M	6.5E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.2E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.5E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2r Adult Resident RME Groundwater at Property 30448
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	94	µg/L	94	µg/L	M	2.6E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.3E-02
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	19.5	µg/L	19.5	µg/L	M	5.3E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.3E-01
Dermal	Barium	94	µg/L	94	µg/L	M	1.3E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	9.6E-04
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	19.5	µg/L	19.5	µg/L	M	2.8E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.4E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2r Adult Resident CTE Groundwater at Property 30448
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	94	µg/L	94	µg/L	M	1.3E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	6.3E-03
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	19.5	µg/L	19.5	µg/L	M	2.6E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.1E-01
Dermal	Barium	94	µg/L	94	µg/L	M	4.1E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.9E-04
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	19.5	µg/L	19.5	µg/L	M	8.4E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.2E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2r Child Resident RME Groundwater at Property 30448
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	94	µg/L	94	µg/L	M	6.6E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.3E-02
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	19.5	µg/L	19.5	µg/L	M	1.4E-03	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												6.0E-01
Dermal	Barium	94	µg/L	94	µg/L	M	4.0E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.8E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	19.5	µg/L	19.5	µg/L	M	8.2E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.0E-02
												Total Hazard Index Across All Exposure Routes/Pathways	6.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2r Child Resident CTE Groundwater at Property 30448
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	94	µg/L	94	µg/L	M	1.7E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.4E-03
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	19.5	µg/L	19.5	µg/L	M	3.5E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-01
Dermal	Barium	94	µg/L	94	µg/L	M	9.2E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	6.5E-04
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	19.5	µg/L	19.5	µg/L	M	1.9E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.6E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2s Adult Resident RME Groundwater at Property 30553
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	1110	µg/L	1110	µg/L	M	3.0E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.5E-01
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-01
Dermal	Barium	1110	µg/L	1110	µg/L	M	1.6E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.1E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.1E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2s Adult Resident CTE Groundwater at Property 30553
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	1110	µg/L	1110	µg/L	M	1.5E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	7.5E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.5E-02
Dermal	Barium	1110	µg/L	1110	µg/L	M	4.8E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.4E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.4E-03
												Total Hazard Index Across All Exposure Routes/Pathways	7.8E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2s Child Resident RME Groundwater at Property 30553
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	1110	µg/L	1110	µg/L	M	7.8E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.9E-01
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.9E-01
Dermal	Barium	1110	µg/L	1110	µg/L	M	4.7E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	3.3E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.3E-02
												Total Hazard Index Across All Exposure Routes/Pathways	4.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2s Child Resident CTE Groundwater at Property 30553
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	1110	µg/L	1110	µg/L	M	2.0E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	9.9E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												9.9E-02
Dermal	Barium	1110	µg/L	1110	µg/L	M	1.1E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	7.7E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.7E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.1E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2t Adult Resident RME Groundwater at Property 30914
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	161	µg/L	161	µg/L	M	4.4E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.2E-02
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	12.4	µg/L	12.4	µg/L	M	3.4E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.4E-01
Dermal	Barium	161	µg/L	161	µg/L	M	2.3E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.6E-03
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	12.4	µg/L	12.4	µg/L	M	1.8E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.5E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2t Adult Resident CTE Groundwater at Property 30914
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	161	µg/L	161	µg/L	M	2.2E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.1E-02
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	12.4	µg/L	12.4	µg/L	M	1.7E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.2E-01
Dermal	Barium	161	µg/L	161	µg/L	M	6.9E-06	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	5.0E-04
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	12.4	µg/L	12.4	µg/L	M	5.4E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.4E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.3E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2t Child Resident RME Groundwater at Property 30914
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	161	µg/L	161	µg/L	M	1.1E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.7E-02
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	12.4	µg/L	12.4	µg/L	M	8.7E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												6.2E-01
Dermal	Barium	161	µg/L	161	µg/L	M	6.8E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.9E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	12.4	µg/L	12.4	µg/L	M	5.2E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.2E-02
												Total Hazard Index Across All Exposure Routes/Pathways	6.9E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2t Child Resident CTE Groundwater at Property 30914
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	161	µg/L	161	µg/L	M	2.9E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.4E-02
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	12.4	µg/L	12.4	µg/L	M	2.2E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.6E-01
Dermal	Barium	161	µg/L	161	µg/L	M	1.6E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.1E-03
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	12.4	µg/L	12.4	µg/L	M	1.2E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.7E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.7E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2u Adult Resident RME Groundwater at Property 30965
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	419	µg/L	419	µg/L	M	1.1E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.7E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												5.7E-02
Dermal	Barium	419	µg/L	419	µg/L	M	6.0E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.3E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												4.3E-03
												Total Hazard Index Across All Exposure Routes/Pathways	6.2E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2u Adult Resident CTE Groundwater at Property 30965
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	419	µg/L	419	µg/L	M	5.6E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.8E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.8E-02
Dermal	Barium	419	µg/L	419	µg/L	M	1.8E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.3E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.3E-03
												Total Hazard Index Across All Exposure Routes/Pathways	2.9E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2u Child Resident RME Groundwater at Property 30965
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	419	µg/L	419	µg/L	M	2.9E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	1.5E-01
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-01
Dermal	Barium	419	µg/L	419	µg/L	M	1.8E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.3E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.3E-02
												Total Hazard Index Across All Exposure Routes/Pathways	1.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2u Child Resident CTE Groundwater at Property 30965
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	419	µg/L	419	µg/L	M	7.5E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	3.7E-02
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.7E-02
Dermal	Barium	419	µg/L	419	µg/L	M	4.1E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	2.9E-03
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.9E-03
												Total Hazard Index Across All Exposure Routes/Pathways	4.0E-02

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2v Adult Resident RME Groundwater at Property 31016
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	608	µg/L	608	µg/L	M	1.7E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	8.3E-02
	Cadmium	4	µg/L	4	µg/L	M	1.1E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	2.2E-01
	Lead	12.8	µg/L	12.8	µg/L	M	3.5E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												3.0E-01
Dermal	Barium	608	µg/L	608	µg/L	M	8.7E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	6.2E-03
	Cadmium	4	µg/L	4	µg/L	M	5.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	2.3E-02
	Lead	12.8	µg/L	12.8	µg/L	M	1.8E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.9E-02
												Total Hazard Index Across All Exposure Routes/Pathways	3.3E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2v Adult Resident CTE Groundwater at Property 31016
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	608	µg/L	608	µg/L	M	8.2E-03	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	4.1E-02
	Cadmium	4	µg/L	4	µg/L	M	5.4E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.1E-01
	Lead	12.8	µg/L	12.8	µg/L	M	1.7E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												1.5E-01
Dermal	Barium	608	µg/L	608	µg/L	M	2.6E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.9E-03
	Cadmium	4	µg/L	4	µg/L	M	1.7E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.9E-03
	Lead	12.8	µg/L	12.8	µg/L	M	5.5E-08	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.8E-03
												Total Hazard Index Across All Exposure Routes/Pathways	1.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2v Child Resident RME Groundwater at Property 31016
Calculation of Non-Cancer Hazards, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	608	µg/L	608	µg/L	M	4.3E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	2.1E-01
	Cadmium	4	µg/L	4	µg/L	M	2.8E-04	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	5.6E-01
	Lead	12.8	µg/L	12.8	µg/L	M	9.0E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												7.8E-01
Dermal	Barium	608	µg/L	608	µg/L	M	2.6E-04	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	1.8E-02
	Cadmium	4	µg/L	4	µg/L	M	1.7E-06	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	6.8E-02
	Lead	12.8	µg/L	12.8	µg/L	M	5.4E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												8.6E-02
												Total Hazard Index Across All Exposure Routes/Pathways	8.6E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 7.2v Child Resident CTE Groundwater at Property 31016
Calculation of Non-Cancer Hazards, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Hazard Calculation	Intake (Non-Cancer)	Intake (Non-Cancer) Units	Reference Dose	Reference Dose Units	Reference Concentration	Reference Concentration Units	Hazard Quotient
Ingestion	Barium	608	µg/L	608	µg/L	M	1.1E-02	mg/kg-day	2.0E-01	mg/kg-day	NA	NA	5.4E-02
	Cadmium	4	µg/L	4	µg/L	M	7.2E-05	mg/kg-day	5.0E-04	mg/kg-day	NA	NA	1.4E-01
	Lead	12.8	µg/L	12.8	µg/L	M	2.3E-04	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.0E-01
Dermal	Barium	608	µg/L	608	µg/L	M	5.9E-05	mg/kg-day	1.4E-02	mg/kg-day	NA	NA	4.2E-03
	Cadmium	4	µg/L	4	µg/L	M	3.9E-07	mg/kg-day	2.5E-05	mg/kg-day	NA	NA	1.6E-02
	Lead	12.8	µg/L	12.8	µg/L	M	1.2E-07	mg/kg-day	NA	mg/kg-day	NA	NA	NC
	(Total)												2.0E-02
												Total Hazard Index Across All Exposure Routes/Pathways	2.2E-01

Notes:
EPC Selected for Hazard Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.1a Adult Resident RME Soil at Property 8
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3415	mg/kg	3415	mg/kg	M	1.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3415	mg/kg	3415	mg/kg	M	6.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
										Total Cancer Risk Across All Exposure Routes/Pathways	NC

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1a Adult Resident CTE Soil at Property 8
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3415	mg/kg	3415	mg/kg	M	1.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3415	mg/kg	3415	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
										Total Cancer Risk Across All Exposure Routes/Pathways	NC

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1a Child Resident RME Soil at Property 8
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3415	mg/kg	3415	mg/kg	M	3.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3415	mg/kg	3415	mg/kg	M	1.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
										Total Cancer Risk Across All Exposure Routes/Pathways	NC

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1a Child Resident CTE Soil at Property 8
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3415	mg/kg	3415	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3415	mg/kg	3415	mg/kg	M	4.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
										Total Cancer Risk Across All Exposure Routes/Pathways	NC

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1b Adult Resident RME Soil at Property 69
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	415	mg/kg	415	mg/kg	M	1.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	415	mg/kg	415	mg/kg	M	7.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
										Total Cancer Risk Across All Exposure Routes/Pathways	NC

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1b Adult Resident CTE Soil at Property 69
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	415	mg/kg	415	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	415	mg/kg	415	mg/kg	M	2.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
										Total Cancer Risk Across All Exposure Routes/Pathways	NC

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1b Child Resident RME Soil at Property 69
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	415	mg/kg	415	mg/kg	M	4.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	415	mg/kg	415	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
										Total Cancer Risk Across All Exposure Routes/Pathways	NC

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1b Child Resident CTE Soil at Property 69
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	415	mg/kg	415	mg/kg	M	5.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	415	mg/kg	415	mg/kg	M	5.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
										Total Cancer Risk Across All Exposure Routes/Pathways	NC

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1c Adult Resident RME Soil at Property 438
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10700	mg/kg	10700	mg/kg	M	5.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.98	mg/kg	9.98	mg/kg	M	4.7E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.0E-06
	Barium	3440	mg/kg	3440	mg/kg	M	1.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	12.2	mg/kg	12.2	mg/kg	M	5.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.9	mg/kg	11.9	mg/kg	M	5.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14300	mg/kg	14300	mg/kg	M	6.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	425	mg/kg	425	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1010	mg/kg	1010	mg/kg	M	4.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.1	mg/kg	24.1	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1030	mg/kg	1030	mg/kg	M	4.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.0E-06
Dermal	Aluminum	10700	mg/kg	10700	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.98	mg/kg	9.98	mg/kg	M	5.6E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.4E-07
	Barium	3440	mg/kg	3440	mg/kg	M	6.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	12.2	mg/kg	12.2	mg/kg	M	2.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.9	mg/kg	11.9	mg/kg	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14300	mg/kg	14300	mg/kg	M	2.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	425	mg/kg	425	mg/kg	M	8.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1010	mg/kg	1010	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.1	mg/kg	24.1	mg/kg	M	4.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1030	mg/kg	1030	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.4E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	7.9E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.8E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.6E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1c Adult Resident CTE Soil at Property 438
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10700	mg/kg	10700	mg/kg	M	5.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.98	mg/kg	9.98	mg/kg	M	4.8E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.2E-07
	Barium	3440	mg/kg	3440	mg/kg	M	1.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	12.2	mg/kg	12.2	mg/kg	M	5.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.9	mg/kg	11.9	mg/kg	M	5.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14300	mg/kg	14300	mg/kg	M	6.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	425	mg/kg	425	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1010	mg/kg	1010	mg/kg	M	4.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.1	mg/kg	24.1	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1030	mg/kg	1030	mg/kg	M	4.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.2E-07
Dermal	Aluminum	10700	mg/kg	10700	mg/kg	M	5.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.98	mg/kg	9.98	mg/kg	M	1.6E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.5E-08
	Barium	3440	mg/kg	3440	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	12.2	mg/kg	12.2	mg/kg	M	6.7E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.9	mg/kg	11.9	mg/kg	M	6.5E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14300	mg/kg	14300	mg/kg	M	7.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	425	mg/kg	425	mg/kg	M	2.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1010	mg/kg	1010	mg/kg	M	5.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.1	mg/kg	24.1	mg/kg	M	1.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1030	mg/kg	1030	mg/kg	M	5.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.5E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	7.4E-07

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	2.0E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.7E-06

Table 8.1c Child Resident RME Soil at Property 438
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10700	mg/kg	10700	mg/kg	M	1.2E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.98	mg/kg	9.98	mg/kg	M	1.1E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.6E-05
	Barium	3440	mg/kg	3440	mg/kg	M	3.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	12.2	mg/kg	12.2	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.9	mg/kg	11.9	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14300	mg/kg	14300	mg/kg	M	1.6E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	425	mg/kg	425	mg/kg	M	4.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1010	mg/kg	1010	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.1	mg/kg	24.1	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1030	mg/kg	1030	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.6E-05
Dermal	Aluminum	10700	mg/kg	10700	mg/kg	M	3.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.98	mg/kg	9.98	mg/kg	M	9.2E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.4E-06
	Barium	3440	mg/kg	3440	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	12.2	mg/kg	12.2	mg/kg	M	3.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.9	mg/kg	11.9	mg/kg	M	3.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14300	mg/kg	14300	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	425	mg/kg	425	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1010	mg/kg	1010	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.1	mg/kg	24.1	mg/kg	M	7.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1030	mg/kg	1030	mg/kg	M	3.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.4E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	1.8E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	7.9E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.6E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1c Child Resident CTE Soil at Property 438
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10700	mg/kg	10700	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.98	mg/kg	9.98	mg/kg	M	1.3E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.9E-06
	Barium	3440	mg/kg	3440	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	12.2	mg/kg	12.2	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.9	mg/kg	11.9	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14300	mg/kg	14300	mg/kg	M	1.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	425	mg/kg	425	mg/kg	M	5.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1010	mg/kg	1010	mg/kg	M	1.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.1	mg/kg	24.1	mg/kg	M	3.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1030	mg/kg	1030	mg/kg	M	1.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.9E-06
Dermal	Aluminum	10700	mg/kg	10700	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.98	mg/kg	9.98	mg/kg	M	4.3E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.4E-08
	Barium	3440	mg/kg	3440	mg/kg	M	4.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	12.2	mg/kg	12.2	mg/kg	M	1.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.9	mg/kg	11.9	mg/kg	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14300	mg/kg	14300	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	425	mg/kg	425	mg/kg	M	6.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1010	mg/kg	1010	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.1	mg/kg	24.1	mg/kg	M	3.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1030	mg/kg	1030	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.4E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	2.0E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways: 7.4E-07

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: 2.7E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1d Adult Resident RME Soil at Property 486
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 486
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	21600	mg/kg	21600	mg/kg	M	1.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	17.2	mg/kg	17.2	mg/kg	M	8.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8.3	mg/kg	8.3	mg/kg	M	3.9E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.8E-06
	Barium	854	mg/kg	854	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.7	mg/kg	1.7	mg/kg	M	8.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.8	mg/kg	5.8	mg/kg	M	2.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22000	mg/kg	22000	mg/kg	M	1.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	914	mg/kg	914	mg/kg	M	4.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	720	mg/kg	720	mg/kg	M	3.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.1	mg/kg	40.1	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	300	mg/kg	300	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.8E-06
Dermal	Aluminum	21600	mg/kg	21600	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	17.2	mg/kg	17.2	mg/kg	M	3.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8.3	mg/kg	8.3	mg/kg	M	4.7E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.0E-07
	Barium	854	mg/kg	854	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.7	mg/kg	1.7	mg/kg	M	3.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.8	mg/kg	5.8	mg/kg	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22000	mg/kg	22000	mg/kg	M	4.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	914	mg/kg	914	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	720	mg/kg	720	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.1	mg/kg	40.1	mg/kg	M	7.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	300	mg/kg	300	mg/kg	M	5.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.0E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	6.5E-06
										Total Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-05
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.1E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1d Adult Resident CTE Soil at Property 486
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 486
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	21600	mg/kg	21600	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	17.2	mg/kg	17.2	mg/kg	M	8.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8.3	mg/kg	8.3	mg/kg	M	4.0E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.0E-07
	Barium	854	mg/kg	854	mg/kg	M	4.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.7	mg/kg	1.7	mg/kg	M	8.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.8	mg/kg	5.8	mg/kg	M	2.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22000	mg/kg	22000	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	914	mg/kg	914	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	720	mg/kg	720	mg/kg	M	3.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.1	mg/kg	40.1	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	300	mg/kg	300	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.0E-07
Dermal	Aluminum	21600	mg/kg	21600	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	17.2	mg/kg	17.2	mg/kg	M	9.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8.3	mg/kg	8.3	mg/kg	M	1.4E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-08
	Barium	854	mg/kg	854	mg/kg	M	4.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.7	mg/kg	1.7	mg/kg	M	9.3E-11	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.8	mg/kg	5.8	mg/kg	M	3.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22000	mg/kg	22000	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	914	mg/kg	914	mg/kg	M	5.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	720	mg/kg	720	mg/kg	M	3.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.1	mg/kg	40.1	mg/kg	M	2.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	300	mg/kg	300	mg/kg	M	1.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.0E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	6.2E-07

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.3E-06

Table 8.1d Child Resident RME Soil at Property 486
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 486
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	21600	mg/kg	21600	mg/kg	M	2.4E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	17.2	mg/kg	17.2	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8.3	mg/kg	8.3	mg/kg	M	9.1E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.4E-05
	Barium	854	mg/kg	854	mg/kg	M	9.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.7	mg/kg	1.7	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.8	mg/kg	5.8	mg/kg	M	6.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22000	mg/kg	22000	mg/kg	M	2.4E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	914	mg/kg	914	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	720	mg/kg	720	mg/kg	M	7.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.1	mg/kg	40.1	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	300	mg/kg	300	mg/kg	M	3.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.4E-05
Dermal	Aluminum	21600	mg/kg	21600	mg/kg	M	6.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	17.2	mg/kg	17.2	mg/kg	M	5.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8.3	mg/kg	8.3	mg/kg	M	7.6E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.1E-06
	Barium	854	mg/kg	854	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.7	mg/kg	1.7	mg/kg	M	5.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.8	mg/kg	5.8	mg/kg	M	1.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22000	mg/kg	22000	mg/kg	M	6.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	914	mg/kg	914	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	720	mg/kg	720	mg/kg	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.1	mg/kg	40.1	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	300	mg/kg	300	mg/kg	M	9.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.1E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	1.5E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	6.5E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.1E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1d Child Resident CTE Soil at Property 486
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 486
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	21600	mg/kg	21600	mg/kg	M	2.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	17.2	mg/kg	17.2	mg/kg	M	2.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8.3	mg/kg	8.3	mg/kg	M	1.1E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.6E-06
	Barium	854	mg/kg	854	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.7	mg/kg	1.7	mg/kg	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.8	mg/kg	5.8	mg/kg	M	7.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22000	mg/kg	22000	mg/kg	M	2.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	914	mg/kg	914	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	720	mg/kg	720	mg/kg	M	9.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.1	mg/kg	40.1	mg/kg	M	5.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	300	mg/kg	300	mg/kg	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.6E-06
Dermal	Aluminum	21600	mg/kg	21600	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	17.2	mg/kg	17.2	mg/kg	M	2.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8.3	mg/kg	8.3	mg/kg	M	3.6E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.3E-08
	Barium	854	mg/kg	854	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.7	mg/kg	1.7	mg/kg	M	2.4E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.8	mg/kg	5.8	mg/kg	M	8.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22000	mg/kg	22000	mg/kg	M	3.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	914	mg/kg	914	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	720	mg/kg	720	mg/kg	M	1.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.1	mg/kg	40.1	mg/kg	M	5.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	300	mg/kg	300	mg/kg	M	4.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.3E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.6E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	6.2E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.3E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1e Adult Resident RME Soil at Property 1612
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	5.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8	mg/kg	8	mg/kg	M	3.8E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.6E-06
	Barium	1500	mg/kg	1500	mg/kg	M	7.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.3	mg/kg	13.3	mg/kg	M	6.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16500	mg/kg	16500	mg/kg	M	7.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	249	mg/kg	249	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	6.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	28.1	mg/kg	28.1	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	462	mg/kg	462	mg/kg	M	2.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.6E-06
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	2.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8	mg/kg	8	mg/kg	M	4.5E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.7E-07
	Barium	1500	mg/kg	1500	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.3	mg/kg	13.3	mg/kg	M	2.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16500	mg/kg	16500	mg/kg	M	3.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	249	mg/kg	249	mg/kg	M	4.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	2.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	28.1	mg/kg	28.1	mg/kg	M	5.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	462	mg/kg	462	mg/kg	M	8.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.7E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	6.3E-06
										Total Child Cancer Risk Across All Exposure Routes/Pathways	1.4E-05
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.1E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1e Adult Resident CTE Soil at Property 1612
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1216
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	5.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8	mg/kg	8	mg/kg	M	3.8E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.8E-07
	Barium	1500	mg/kg	1500	mg/kg	M	7.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.3	mg/kg	13.3	mg/kg	M	6.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16500	mg/kg	16500	mg/kg	M	7.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	249	mg/kg	249	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	7.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	28.1	mg/kg	28.1	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	462	mg/kg	462	mg/kg	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.8E-07
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	6.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8	mg/kg	8	mg/kg	M	1.3E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-08
	Barium	1500	mg/kg	1500	mg/kg	M	8.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.3	mg/kg	13.3	mg/kg	M	7.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16500	mg/kg	16500	mg/kg	M	9.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	249	mg/kg	249	mg/kg	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	7.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	28.1	mg/kg	28.1	mg/kg	M	1.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	462	mg/kg	462	mg/kg	M	2.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.0E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	6.0E-07

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.2E-06

Table 8.1e Child Resident RME Soil at Property 1612
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	1.2E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8	mg/kg	8	mg/kg	M	8.8E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.3E-05
	Barium	1500	mg/kg	1500	mg/kg	M	1.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.3	mg/kg	13.3	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16500	mg/kg	16500	mg/kg	M	1.8E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	249	mg/kg	249	mg/kg	M	2.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	1.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	28.1	mg/kg	28.1	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	462	mg/kg	462	mg/kg	M	5.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.3E-05
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	3.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8	mg/kg	8	mg/kg	M	7.4E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.1E-06
	Barium	1500	mg/kg	1500	mg/kg	M	4.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.3	mg/kg	13.3	mg/kg	M	4.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16500	mg/kg	16500	mg/kg	M	5.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	249	mg/kg	249	mg/kg	M	7.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	28.1	mg/kg	28.1	mg/kg	M	8.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	462	mg/kg	462	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.1E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	1.4E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	6.3E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.1E-05

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1e Child Resident CTE Soil at Property 1612
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8	mg/kg	8	mg/kg	M	1.0E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.5E-06
	Barium	1500	mg/kg	1500	mg/kg	M	1.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.3	mg/kg	13.3	mg/kg	M	1.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16500	mg/kg	16500	mg/kg	M	2.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	249	mg/kg	249	mg/kg	M	3.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	1.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	28.1	mg/kg	28.1	mg/kg	M	3.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	462	mg/kg	462	mg/kg	M	5.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.5E-06
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	8	mg/kg	8	mg/kg	M	3.4E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.2E-08
	Barium	1500	mg/kg	1500	mg/kg	M	2.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.3	mg/kg	13.3	mg/kg	M	1.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16500	mg/kg	16500	mg/kg	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	249	mg/kg	249	mg/kg	M	3.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	2.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	28.1	mg/kg	28.1	mg/kg	M	4.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	462	mg/kg	462	mg/kg	M	6.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.2E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.6E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	6.0E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.2E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1f Adult Resident RME Soil at Property 1643
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1643
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	246	mg/kg	246	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	246	mg/kg	246	mg/kg	M	4.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1f Adult Resident CTE Soil at Property 1643
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1643
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	246	mg/kg	246	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	246	mg/kg	246	mg/kg	M	1.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1f Child Resident RME Soil at Property 1643
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1643
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	246	mg/kg	246	mg/kg	M	2.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	246	mg/kg	246	mg/kg	M	7.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1f Child Resident CTE Soil at Property 1643
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1643
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	246	mg/kg	246	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	246	mg/kg	246	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1g Adult Resident RME Soil at Property 1653
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1653
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	644	mg/kg	644	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	644	mg/kg	644	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1g Adult Resident CTE Soil at Property 1643
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1643
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	644	mg/kg	644	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	644	mg/kg	644	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00
Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1g Child Resident RME Soil at Property 1643
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1643
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	644	mg/kg	644	mg/kg	M	7.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	644	mg/kg	644	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1g Child Resident CTE Soil at Property 1643
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 1643
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	644	mg/kg	644	mg/kg	M	8.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	644	mg/kg	644	mg/kg	M	9.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1h Adult Resident RME Soil at Property 5003
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5003
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	8670	mg/kg	8670	mg/kg	M	4.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4	mg/kg	4	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	7.5	mg/kg	7.5	mg/kg	M	3.5E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.3E-06
	Barium	612	mg/kg	612	mg/kg	M	2.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.9	mg/kg	2.9	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9	mg/kg	9	mg/kg	M	4.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	15700	mg/kg	15700	mg/kg	M	7.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8582	mg/kg	8582	mg/kg	M	4.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1240	mg/kg	1240	mg/kg	M	5.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25	mg/kg	25	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	903	mg/kg	903	mg/kg	M	4.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.3E-06
Dermal	Aluminum	8670	mg/kg	8670	mg/kg	M	1.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4	mg/kg	4	mg/kg	M	7.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	7.5	mg/kg	7.5	mg/kg	M	4.2E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.3E-07
	Barium	612	mg/kg	612	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.9	mg/kg	2.9	mg/kg	M	5.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9	mg/kg	9	mg/kg	M	1.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	15700	mg/kg	15700	mg/kg	M	2.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8582	mg/kg	8582	mg/kg	M	1.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1240	mg/kg	1240	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25	mg/kg	25	mg/kg	M	4.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	903	mg/kg	903	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.3E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	5.9E-06
										Total Child Cancer Risk Across All Exposure Routes/Pathways	1.3E-05
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.9E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1h Adult Resident CTE Soil at Property 5003
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5003
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	8670	mg/kg	8670	mg/kg	M	4.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4	mg/kg	4	mg/kg	M	1.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	7.5	mg/kg	7.5	mg/kg	M	3.6E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.4E-07
	Barium	612	mg/kg	612	mg/kg	M	2.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.9	mg/kg	2.9	mg/kg	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9	mg/kg	9	mg/kg	M	4.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	15700	mg/kg	15700	mg/kg	M	7.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8582	mg/kg	8582	mg/kg	M	4.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1240	mg/kg	1240	mg/kg	M	5.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25	mg/kg	25	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	903	mg/kg	903	mg/kg	M	4.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.4E-07
Dermal	Aluminum	8670	mg/kg	8670	mg/kg	M	4.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4	mg/kg	4	mg/kg	M	2.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	7.5	mg/kg	7.5	mg/kg	M	1.2E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.8E-08
	Barium	612	mg/kg	612	mg/kg	M	3.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.9	mg/kg	2.9	mg/kg	M	1.6E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9	mg/kg	9	mg/kg	M	4.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	15700	mg/kg	15700	mg/kg	M	8.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8582	mg/kg	8582	mg/kg	M	4.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1240	mg/kg	1240	mg/kg	M	6.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25	mg/kg	25	mg/kg	M	1.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	903	mg/kg	903	mg/kg	M	4.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.8E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	5.6E-07
										Total Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-06
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.0E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1h Child Resident RME Soil at Property 5003
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5003
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	8670	mg/kg	8670	mg/kg	M	9.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4	mg/kg	4	mg/kg	M	4.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	7.5	mg/kg	7.5	mg/kg	M	8.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.2E-05
	Barium	612	mg/kg	612	mg/kg	M	6.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.9	mg/kg	2.9	mg/kg	M	3.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9	mg/kg	9	mg/kg	M	9.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	15700	mg/kg	15700	mg/kg	M	1.7E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8582	mg/kg	8582	mg/kg	M	9.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1240	mg/kg	1240	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25	mg/kg	25	mg/kg	M	2.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	903	mg/kg	903	mg/kg	M	9.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.2E-05
Dermal	Aluminum	8670	mg/kg	8670	mg/kg	M	2.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4	mg/kg	4	mg/kg	M	1.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	7.5	mg/kg	7.5	mg/kg	M	6.9E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.0E-06
	Barium	612	mg/kg	612	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.9	mg/kg	2.9	mg/kg	M	8.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9	mg/kg	9	mg/kg	M	2.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	15700	mg/kg	15700	mg/kg	M	4.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8582	mg/kg	8582	mg/kg	M	2.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1240	mg/kg	1240	mg/kg	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25	mg/kg	25	mg/kg	M	7.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	903	mg/kg	903	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.0E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	1.3E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	5.9E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.9E-05

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1h Child Resident CTE Soil at Property 5003
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5003
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	8670	mg/kg	8670	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4	mg/kg	4	mg/kg	M	5.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	7.5	mg/kg	7.5	mg/kg	M	9.6E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.4E-06
	Barium	612	mg/kg	612	mg/kg	M	7.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.9	mg/kg	2.9	mg/kg	M	3.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9	mg/kg	9	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	15700	mg/kg	15700	mg/kg	M	2.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8582	mg/kg	8582	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1240	mg/kg	1240	mg/kg	M	1.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25	mg/kg	25	mg/kg	M	3.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	903	mg/kg	903	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.4E-06
Dermal	Aluminum	8670	mg/kg	8670	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4	mg/kg	4	mg/kg	M	5.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	7.5	mg/kg	7.5	mg/kg	M	3.2E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.8E-08
	Barium	612	mg/kg	612	mg/kg	M	8.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.9	mg/kg	2.9	mg/kg	M	4.2E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9	mg/kg	9	mg/kg	M	1.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	15700	mg/kg	15700	mg/kg	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8582	mg/kg	8582	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1240	mg/kg	1240	mg/kg	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25	mg/kg	25	mg/kg	M	3.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	903	mg/kg	903	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.8E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.5E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	5.6E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.0E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1i Adult Resident RME Soil at Property 5007
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	14000	mg/kg	14000	mg/kg	M	6.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.3	mg/kg	11.3	mg/kg	M	5.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.1	mg/kg	11.1	mg/kg	M	5.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.8E-06
	Barium	510	mg/kg	510	mg/kg	M	2.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	10.1	mg/kg	10.1	mg/kg	M	4.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.3	mg/kg	12.3	mg/kg	M	5.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19300	mg/kg	19300	mg/kg	M	9.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	633	mg/kg	633	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	5.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	39.9	mg/kg	39.9	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	9250	mg/kg	9250	mg/kg	M	4.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.8E-06
Dermal	Aluminum	14000	mg/kg	14000	mg/kg	M	2.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.3	mg/kg	11.3	mg/kg	M	2.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.1	mg/kg	11.1	mg/kg	M	6.2E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.4E-07
	Barium	510	mg/kg	510	mg/kg	M	9.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	10.1	mg/kg	10.1	mg/kg	M	1.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.3	mg/kg	12.3	mg/kg	M	2.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19300	mg/kg	19300	mg/kg	M	3.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	633	mg/kg	633	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	39.9	mg/kg	39.9	mg/kg	M	7.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	9250	mg/kg	9250	mg/kg	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.4E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	8.8E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	2.0E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.9E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1i Adult Resident CTE Soil at Property 5007
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	14000	mg/kg	14000	mg/kg	M	6.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.3	mg/kg	11.3	mg/kg	M	5.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.1	mg/kg	11.1	mg/kg	M	5.3E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.0E-07
	Barium	510	mg/kg	510	mg/kg	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	10.1	mg/kg	10.1	mg/kg	M	4.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.3	mg/kg	12.3	mg/kg	M	5.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19300	mg/kg	19300	mg/kg	M	9.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	633	mg/kg	633	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	5.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	39.9	mg/kg	39.9	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	9250	mg/kg	9250	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.0E-07
Dermal	Aluminum	14000	mg/kg	14000	mg/kg	M	7.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.3	mg/kg	11.3	mg/kg	M	6.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.1	mg/kg	11.1	mg/kg	M	1.8E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.7E-08
	Barium	510	mg/kg	510	mg/kg	M	2.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	10.1	mg/kg	10.1	mg/kg	M	5.5E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.3	mg/kg	12.3	mg/kg	M	6.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19300	mg/kg	19300	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	633	mg/kg	633	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	5.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	39.9	mg/kg	39.9	mg/kg	M	2.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	9250	mg/kg	9250	mg/kg	M	5.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.7E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	8.3E-07
										Total Child Cancer Risk Across All Exposure Routes/Pathways	2.2E-06
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.0E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1i Child Resident RME Soil at Property 5007
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	14000	mg/kg	14000	mg/kg	M	1.5E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.3	mg/kg	11.3	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.1	mg/kg	11.1	mg/kg	M	1.2E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.8E-05
	Barium	510	mg/kg	510	mg/kg	M	5.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	10.1	mg/kg	10.1	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.3	mg/kg	12.3	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19300	mg/kg	19300	mg/kg	M	2.1E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	633	mg/kg	633	mg/kg	M	6.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	39.9	mg/kg	39.9	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	9250	mg/kg	9250	mg/kg	M	1.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.8E-05
Dermal	Aluminum	14000	mg/kg	14000	mg/kg	M	4.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.3	mg/kg	11.3	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.1	mg/kg	11.1	mg/kg	M	1.0E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.5E-06
	Barium	510	mg/kg	510	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	10.1	mg/kg	10.1	mg/kg	M	3.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.3	mg/kg	12.3	mg/kg	M	3.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19300	mg/kg	19300	mg/kg	M	5.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	633	mg/kg	633	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	3.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	39.9	mg/kg	39.9	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	9250	mg/kg	9250	mg/kg	M	2.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.5E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	2.0E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	8.8E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.9E-05

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1i Child Resident CTE Soil at Property 5007
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	14000	mg/kg	14000	mg/kg	M	1.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.3	mg/kg	11.3	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.1	mg/kg	11.1	mg/kg	M	1.4E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.1E-06
	Barium	510	mg/kg	510	mg/kg	M	6.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	10.1	mg/kg	10.1	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.3	mg/kg	12.3	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19300	mg/kg	19300	mg/kg	M	2.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	633	mg/kg	633	mg/kg	M	8.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	39.9	mg/kg	39.9	mg/kg	M	5.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	9250	mg/kg	9250	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.1E-06
Dermal	Aluminum	14000	mg/kg	14000	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.3	mg/kg	11.3	mg/kg	M	1.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.1	mg/kg	11.1	mg/kg	M	4.8E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.2E-08
	Barium	510	mg/kg	510	mg/kg	M	7.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	10.1	mg/kg	10.1	mg/kg	M	1.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.3	mg/kg	12.3	mg/kg	M	1.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19300	mg/kg	19300	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	633	mg/kg	633	mg/kg	M	9.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	39.9	mg/kg	39.9	mg/kg	M	5.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	9250	mg/kg	9250	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.2E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	2.2E-06
										Total Adult Cancer Risk Across All Exposure Routes/Pathways	8.3E-07
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.0E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1j Adult Resident RME Soil at Property 5008
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	5.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	2.6	mg/kg	2.6	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	2.7E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.0E-06
	Barium	826	mg/kg	826	mg/kg	M	3.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.7	mg/kg	2.7	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.8	mg/kg	13.8	mg/kg	M	6.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16200	mg/kg	16200	mg/kg	M	7.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	640	mg/kg	640	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	5.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	22.5	mg/kg	22.5	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	231	mg/kg	231	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.0E-06
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	2.6	mg/kg	2.6	mg/kg	M	4.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	3.2E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.8E-07
	Barium	826	mg/kg	826	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.7	mg/kg	2.7	mg/kg	M	5.1E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.8	mg/kg	13.8	mg/kg	M	2.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16200	mg/kg	16200	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	640	mg/kg	640	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	22.5	mg/kg	22.5	mg/kg	M	4.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	231	mg/kg	231	mg/kg	M	4.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.8E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	4.5E-06
										Total Child Cancer Risk Across All Exposure Routes/Pathways	1.0E-05
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1j Adult Resident CTE Soil at Property 5008
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	5.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	2.6	mg/kg	2.6	mg/kg	M	1.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	2.7E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.1E-07
	Barium	826	mg/kg	826	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.7	mg/kg	2.7	mg/kg	M	1.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.8	mg/kg	13.8	mg/kg	M	6.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16200	mg/kg	16200	mg/kg	M	7.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	640	mg/kg	640	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	5.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	22.5	mg/kg	22.5	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	231	mg/kg	231	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.1E-07
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	5.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	2.6	mg/kg	2.6	mg/kg	M	1.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	9.3E-09	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.4E-08
	Barium	826	mg/kg	826	mg/kg	M	4.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.7	mg/kg	2.7	mg/kg	M	1.5E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.8	mg/kg	13.8	mg/kg	M	7.5E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16200	mg/kg	16200	mg/kg	M	8.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	640	mg/kg	640	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	5.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	22.5	mg/kg	22.5	mg/kg	M	1.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	231	mg/kg	231	mg/kg	M	1.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.4E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	4.2E-07

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.1E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-06

Table 8.1j Child Resident RME Soil at Property 5008
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	1.2E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	2.6	mg/kg	2.6	mg/kg	M	2.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	6.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.4E-06
	Barium	826	mg/kg	826	mg/kg	M	9.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.7	mg/kg	2.7	mg/kg	M	3.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.8	mg/kg	13.8	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16200	mg/kg	16200	mg/kg	M	1.8E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	640	mg/kg	640	mg/kg	M	7.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	22.5	mg/kg	22.5	mg/kg	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	231	mg/kg	231	mg/kg	M	2.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.4E-06
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	3.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	2.6	mg/kg	2.6	mg/kg	M	8.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	5.2E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.9E-07
	Barium	826	mg/kg	826	mg/kg	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.7	mg/kg	2.7	mg/kg	M	8.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.8	mg/kg	13.8	mg/kg	M	4.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16200	mg/kg	16200	mg/kg	M	5.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	640	mg/kg	640	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	3.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	22.5	mg/kg	22.5	mg/kg	M	6.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	231	mg/kg	231	mg/kg	M	7.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.9E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	1.0E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	4.5E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-05

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1j Child Resident CTE Soil at Property 5008
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	2.6	mg/kg	2.6	mg/kg	M	3.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	7.3E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.1E-06
	Barium	826	mg/kg	826	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.7	mg/kg	2.7	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.8	mg/kg	13.8	mg/kg	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16200	mg/kg	16200	mg/kg	M	2.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	640	mg/kg	640	mg/kg	M	8.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	22.5	mg/kg	22.5	mg/kg	M	2.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	231	mg/kg	231	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.1E-06
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	2.6	mg/kg	2.6	mg/kg	M	3.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	2.4E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.7E-08
	Barium	826	mg/kg	826	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.7	mg/kg	2.7	mg/kg	M	3.9E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	13.8	mg/kg	13.8	mg/kg	M	2.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16200	mg/kg	16200	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	640	mg/kg	640	mg/kg	M	9.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1070	mg/kg	1070	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	22.5	mg/kg	22.5	mg/kg	M	3.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	231	mg/kg	231	mg/kg	M	3.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										3.7E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.1E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	4.2E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1k Adult Resident RME Soil at Property 5012
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5012
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9280	mg/kg	9280	mg/kg	M	4.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.8	mg/kg	5.8	mg/kg	M	2.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1490	mg/kg	1490	mg/kg	M	7.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.9	mg/kg	4.9	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.6	mg/kg	17.6	mg/kg	M	8.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	20500	mg/kg	20500	mg/kg	M	9.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	928	mg/kg	928	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1190	mg/kg	1190	mg/kg	M	5.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	18.6	mg/kg	18.6	mg/kg	M	8.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	249	mg/kg	249	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	9280	mg/kg	9280	mg/kg	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.8	mg/kg	5.8	mg/kg	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1490	mg/kg	1490	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.9	mg/kg	4.9	mg/kg	M	9.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.6	mg/kg	17.6	mg/kg	M	3.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	20500	mg/kg	20500	mg/kg	M	3.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	928	mg/kg	928	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1190	mg/kg	1190	mg/kg	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	18.6	mg/kg	18.6	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	249	mg/kg	249	mg/kg	M	4.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1k Adult Resident CTE Soil at Property 5012
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5012
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9280	mg/kg	9280	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.8	mg/kg	5.8	mg/kg	M	2.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1490	mg/kg	1490	mg/kg	M	7.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.9	mg/kg	4.9	mg/kg	M	2.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.6	mg/kg	17.6	mg/kg	M	8.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	20500	mg/kg	20500	mg/kg	M	9.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	928	mg/kg	928	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1190	mg/kg	1190	mg/kg	M	5.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	18.6	mg/kg	18.6	mg/kg	M	8.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	249	mg/kg	249	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	9280	mg/kg	9280	mg/kg	M	5.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.8	mg/kg	5.8	mg/kg	M	3.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1490	mg/kg	1490	mg/kg	M	8.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.9	mg/kg	4.9	mg/kg	M	2.7E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.6	mg/kg	17.6	mg/kg	M	9.6E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	20500	mg/kg	20500	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	928	mg/kg	928	mg/kg	M	5.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1190	mg/kg	1190	mg/kg	M	6.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	18.6	mg/kg	18.6	mg/kg	M	1.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	249	mg/kg	249	mg/kg	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1k Child Resident RME Soil at Property 5012
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5012
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9280	mg/kg	9280	mg/kg	M	1.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.8	mg/kg	5.8	mg/kg	M	6.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1490	mg/kg	1490	mg/kg	M	1.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.9	mg/kg	4.9	mg/kg	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.6	mg/kg	17.6	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	20500	mg/kg	20500	mg/kg	M	2.2E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	928	mg/kg	928	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1190	mg/kg	1190	mg/kg	M	1.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	18.6	mg/kg	18.6	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	249	mg/kg	249	mg/kg	M	2.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	9280	mg/kg	9280	mg/kg	M	2.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.8	mg/kg	5.8	mg/kg	M	1.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1490	mg/kg	1490	mg/kg	M	4.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.9	mg/kg	4.9	mg/kg	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.6	mg/kg	17.6	mg/kg	M	5.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	20500	mg/kg	20500	mg/kg	M	6.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	928	mg/kg	928	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1190	mg/kg	1190	mg/kg	M	3.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	18.6	mg/kg	18.6	mg/kg	M	5.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	249	mg/kg	249	mg/kg	M	7.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1k Child Resident CTE Soil at Property 5012
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5012
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9280	mg/kg	9280	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.8	mg/kg	5.8	mg/kg	M	7.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1490	mg/kg	1490	mg/kg	M	1.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.9	mg/kg	4.9	mg/kg	M	6.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.6	mg/kg	17.6	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	20500	mg/kg	20500	mg/kg	M	2.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	928	mg/kg	928	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1190	mg/kg	1190	mg/kg	M	1.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	18.6	mg/kg	18.6	mg/kg	M	2.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	249	mg/kg	249	mg/kg	M	3.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	9280	mg/kg	9280	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.8	mg/kg	5.8	mg/kg	M	8.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1490	mg/kg	1490	mg/kg	M	2.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.9	mg/kg	4.9	mg/kg	M	7.0E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.6	mg/kg	17.6	mg/kg	M	2.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	20500	mg/kg	20500	mg/kg	M	2.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	928	mg/kg	928	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1190	mg/kg	1190	mg/kg	M	1.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	18.6	mg/kg	18.6	mg/kg	M	2.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	249	mg/kg	249	mg/kg	M	3.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1l Adult Resident RME Soil at Property 5013
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5013
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12100	mg/kg	12100	mg/kg	M	5.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	10.4	mg/kg	10.4	mg/kg	M	4.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.4	mg/kg	12.4	mg/kg	M	5.8E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.7E-06
	Barium	942	mg/kg	942	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	mg/kg	6	mg/kg	M	2.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	15.3	mg/kg	15.3	mg/kg	M	7.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	25100	mg/kg	25100	mg/kg	M	1.2E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	482	mg/kg	482	mg/kg	M	2.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	6.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.4	mg/kg	40.4	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1230	mg/kg	1230	mg/kg	M	5.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.7E-06
Dermal	Aluminum	12100	mg/kg	12100	mg/kg	M	2.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	10.4	mg/kg	10.4	mg/kg	M	1.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.4	mg/kg	12.4	mg/kg	M	7.0E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.0E-06
	Barium	942	mg/kg	942	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	mg/kg	6	mg/kg	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	15.3	mg/kg	15.3	mg/kg	M	2.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	25100	mg/kg	25100	mg/kg	M	4.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	482	mg/kg	482	mg/kg	M	9.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	2.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.4	mg/kg	40.4	mg/kg	M	7.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1230	mg/kg	1230	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.0E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	9.8E-06
										Total Child Cancer Risk Across All Exposure Routes/Pathways	2.2E-05
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.2E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1l Adult Resident CTE Soil at Property 5013
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5013
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12100	mg/kg	12100	mg/kg	M	5.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	10.4	mg/kg	10.4	mg/kg	M	5.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.4	mg/kg	12.4	mg/kg	M	5.9E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.9E-07
	Barium	942	mg/kg	942	mg/kg	M	4.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	mg/kg	6	mg/kg	M	2.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	15.3	mg/kg	15.3	mg/kg	M	7.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	25100	mg/kg	25100	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	482	mg/kg	482	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	7.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.4	mg/kg	40.4	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1230	mg/kg	1230	mg/kg	M	5.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.9E-07
Dermal	Aluminum	12100	mg/kg	12100	mg/kg	M	6.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	10.4	mg/kg	10.4	mg/kg	M	5.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.4	mg/kg	12.4	mg/kg	M	2.0E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-08
	Barium	942	mg/kg	942	mg/kg	M	5.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	mg/kg	6	mg/kg	M	3.3E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	15.3	mg/kg	15.3	mg/kg	M	8.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	25100	mg/kg	25100	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	482	mg/kg	482	mg/kg	M	2.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	7.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.4	mg/kg	40.4	mg/kg	M	2.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1230	mg/kg	1230	mg/kg	M	6.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										3.0E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	9.2E-07
										Total Child Cancer Risk Across All Exposure Routes/Pathways	2.5E-06
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.4E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1l Child Resident RME Soil at Property 5013
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5013
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12100	mg/kg	12100	mg/kg	M	1.3E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	10.4	mg/kg	10.4	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.4	mg/kg	12.4	mg/kg	M	1.4E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05
	Barium	942	mg/kg	942	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	mg/kg	6	mg/kg	M	6.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	15.3	mg/kg	15.3	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	25100	mg/kg	25100	mg/kg	M	2.8E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	482	mg/kg	482	mg/kg	M	5.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	1.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.4	mg/kg	40.4	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1230	mg/kg	1230	mg/kg	M	1.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.0E-05
Dermal	Aluminum	12100	mg/kg	12100	mg/kg	M	3.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	10.4	mg/kg	10.4	mg/kg	M	3.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.4	mg/kg	12.4	mg/kg	M	1.1E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.7E-06
	Barium	942	mg/kg	942	mg/kg	M	2.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	mg/kg	6	mg/kg	M	1.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	15.3	mg/kg	15.3	mg/kg	M	4.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	25100	mg/kg	25100	mg/kg	M	7.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	482	mg/kg	482	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.4	mg/kg	40.4	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1230	mg/kg	1230	mg/kg	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.7E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	2.2E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	9.8E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.2E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1l Child Resident CTE Soil at Property 5013
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5013
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12100	mg/kg	12100	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	10.4	mg/kg	10.4	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.4	mg/kg	12.4	mg/kg	M	1.6E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.4E-06
	Barium	942	mg/kg	942	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	mg/kg	6	mg/kg	M	7.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	15.3	mg/kg	15.3	mg/kg	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	25100	mg/kg	25100	mg/kg	M	3.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	482	mg/kg	482	mg/kg	M	6.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	1.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.4	mg/kg	40.4	mg/kg	M	5.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1230	mg/kg	1230	mg/kg	M	1.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.4E-06
Dermal	Aluminum	12100	mg/kg	12100	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	10.4	mg/kg	10.4	mg/kg	M	1.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.4	mg/kg	12.4	mg/kg	M	5.3E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.0E-08
	Barium	942	mg/kg	942	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	mg/kg	6	mg/kg	M	8.6E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	15.3	mg/kg	15.3	mg/kg	M	2.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	25100	mg/kg	25100	mg/kg	M	3.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	482	mg/kg	482	mg/kg	M	6.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1450	mg/kg	1450	mg/kg	M	2.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	40.4	mg/kg	40.4	mg/kg	M	5.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1230	mg/kg	1230	mg/kg	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.0E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	2.5E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	9.2E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.4E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1m Adult Resident RME Soil at Property 5014
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	626	mg/kg	626	mg/kg	M	2.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	626	mg/kg	626	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1m Adult Resident CTE Soil at Property 5014
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	626	mg/kg	626	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	626	mg/kg	626	mg/kg	M	3.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1m Child Resident RME Soil at Property 5014
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	626	mg/kg	626	mg/kg	M	6.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	626	mg/kg	626	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1m Child Resident CTE Soil at Property 5014
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	626	mg/kg	626	mg/kg	M	8.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	626	mg/kg	626	mg/kg	M	9.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1n Adult Resident RME Soil at Property 20008
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	839	mg/kg	839	mg/kg	M	3.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	839	mg/kg	839	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1n Adult Resident CTE Soil at Property 20008
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	839	mg/kg	839	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	839	mg/kg	839	mg/kg	M	4.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1n Child Resident RME Soil at Property 20008
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	839	mg/kg	839	mg/kg	M	9.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	839	mg/kg	839	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1n Child Resident CTE Soil at Property 20008
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	839	mg/kg	839	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	839	mg/kg	839	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1o Adult Resident RME Soil at Property 20027
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	712	mg/kg	712	mg/kg	M	3.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	712	mg/kg	712	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1o Adult Resident CTE Soil at Property 20027
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	712	mg/kg	712	mg/kg	M	3.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	712	mg/kg	712	mg/kg	M	3.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1o Child Resident RME Soil at Property 20027
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	712	mg/kg	712	mg/kg	M	7.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	712	mg/kg	712	mg/kg	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1o Child Resident CTE Soil at Property 20027
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	712	mg/kg	712	mg/kg	M	9.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	712	mg/kg	712	mg/kg	M	1.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1p Adult Resident RME Soil at Property 20028
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20028
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	13000	mg/kg	13000	mg/kg	M	6.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.5	mg/kg	5.5	mg/kg	M	2.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	576	mg/kg	576	mg/kg	M	2.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.3	mg/kg	2.3	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.7	mg/kg	11.7	mg/kg	M	5.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	17000	mg/kg	17000	mg/kg	M	8.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	361	mg/kg	361	mg/kg	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1130	mg/kg	1130	mg/kg	M	5.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.1	mg/kg	31.1	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	432	mg/kg	432	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	13000	mg/kg	13000	mg/kg	M	2.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.5	mg/kg	5.5	mg/kg	M	1.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	576	mg/kg	576	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.3	mg/kg	2.3	mg/kg	M	4.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.7	mg/kg	11.7	mg/kg	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	17000	mg/kg	17000	mg/kg	M	3.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	361	mg/kg	361	mg/kg	M	6.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1130	mg/kg	1130	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.1	mg/kg	31.1	mg/kg	M	5.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	432	mg/kg	432	mg/kg	M	8.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1p Adult Resident CTE Soil at Property 20028
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20028
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	13000	mg/kg	13000	mg/kg	M	6.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.5	mg/kg	5.5	mg/kg	M	2.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	576	mg/kg	576	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.3	mg/kg	2.3	mg/kg	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.7	mg/kg	11.7	mg/kg	M	5.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	17000	mg/kg	17000	mg/kg	M	8.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	361	mg/kg	361	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1130	mg/kg	1130	mg/kg	M	5.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.1	mg/kg	31.1	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	432	mg/kg	432	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	13000	mg/kg	13000	mg/kg	M	7.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.5	mg/kg	5.5	mg/kg	M	3.0E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	576	mg/kg	576	mg/kg	M	3.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.3	mg/kg	2.3	mg/kg	M	1.3E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.7	mg/kg	11.7	mg/kg	M	6.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	17000	mg/kg	17000	mg/kg	M	9.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	361	mg/kg	361	mg/kg	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1130	mg/kg	1130	mg/kg	M	6.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.1	mg/kg	31.1	mg/kg	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	432	mg/kg	432	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1p Child Resident RME Soil at Property 20028
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20028
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	13000	mg/kg	13000	mg/kg	M	1.4E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.5	mg/kg	5.5	mg/kg	M	6.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	576	mg/kg	576	mg/kg	M	6.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.3	mg/kg	2.3	mg/kg	M	2.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.7	mg/kg	11.7	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	17000	mg/kg	17000	mg/kg	M	1.9E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	361	mg/kg	361	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1130	mg/kg	1130	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.1	mg/kg	31.1	mg/kg	M	3.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	432	mg/kg	432	mg/kg	M	4.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	13000	mg/kg	13000	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.5	mg/kg	5.5	mg/kg	M	1.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	576	mg/kg	576	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.3	mg/kg	2.3	mg/kg	M	7.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.7	mg/kg	11.7	mg/kg	M	3.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	17000	mg/kg	17000	mg/kg	M	5.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	361	mg/kg	361	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1130	mg/kg	1130	mg/kg	M	3.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.1	mg/kg	31.1	mg/kg	M	9.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	432	mg/kg	432	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1p Child Resident CTE Soil at Property 20028
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20028
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	13000	mg/kg	13000	mg/kg	M	1.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.5	mg/kg	5.5	mg/kg	M	7.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	576	mg/kg	576	mg/kg	M	7.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.3	mg/kg	2.3	mg/kg	M	2.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.7	mg/kg	11.7	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	17000	mg/kg	17000	mg/kg	M	2.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	361	mg/kg	361	mg/kg	M	4.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1130	mg/kg	1130	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.1	mg/kg	31.1	mg/kg	M	4.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	432	mg/kg	432	mg/kg	M	5.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	13000	mg/kg	13000	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	5.5	mg/kg	5.5	mg/kg	M	7.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	576	mg/kg	576	mg/kg	M	8.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.3	mg/kg	2.3	mg/kg	M	3.3E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.7	mg/kg	11.7	mg/kg	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	17000	mg/kg	17000	mg/kg	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	361	mg/kg	361	mg/kg	M	5.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1130	mg/kg	1130	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.1	mg/kg	31.1	mg/kg	M	4.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	432	mg/kg	432	mg/kg	M	6.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1q Adult Resident RME Soil at Property 20070
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20070
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	13000	mg/kg	13000	mg/kg	M	6.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.1	mg/kg	9.1	mg/kg	M	4.3E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.4E-06
	Barium	430	mg/kg	430	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	6.4	mg/kg	6.4	mg/kg	M	3.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16800	mg/kg	16800	mg/kg	M	7.9E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	187	mg/kg	187	mg/kg	M	8.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	755	mg/kg	755	mg/kg	M	3.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	44.5	mg/kg	44.5	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	192	mg/kg	192	mg/kg	M	9.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.4E-06
Dermal	Aluminum	13000	mg/kg	13000	mg/kg	M	2.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.1	mg/kg	9.1	mg/kg	M	5.1E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.7E-07
	Barium	430	mg/kg	430	mg/kg	M	8.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	6.4	mg/kg	6.4	mg/kg	M	1.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16800	mg/kg	16800	mg/kg	M	3.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	187	mg/kg	187	mg/kg	M	3.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	755	mg/kg	755	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	44.5	mg/kg	44.5	mg/kg	M	8.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	192	mg/kg	192	mg/kg	M	3.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.7E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	7.2E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.3E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1q Adult Resident CTE Soil at Property 20070
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20070
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	13000	mg/kg	13000	mg/kg	M	6.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.1	mg/kg	9.1	mg/kg	M	4.4E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.5E-07
	Barium	430	mg/kg	430	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	6.4	mg/kg	6.4	mg/kg	M	3.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16800	mg/kg	16800	mg/kg	M	8.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	187	mg/kg	187	mg/kg	M	9.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	755	mg/kg	755	mg/kg	M	3.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	44.5	mg/kg	44.5	mg/kg	M	2.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	192	mg/kg	192	mg/kg	M	9.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.5E-07
Dermal	Aluminum	13000	mg/kg	13000	mg/kg	M	7.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.1	mg/kg	9.1	mg/kg	M	1.5E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.2E-08
	Barium	430	mg/kg	430	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	6.4	mg/kg	6.4	mg/kg	M	3.5E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16800	mg/kg	16800	mg/kg	M	9.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	187	mg/kg	187	mg/kg	M	1.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	755	mg/kg	755	mg/kg	M	4.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	44.5	mg/kg	44.5	mg/kg	M	2.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	192	mg/kg	192	mg/kg	M	1.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.2E-08

Total Cancer Risk Across All Exposure Routes/Pathways: 6.8E-07

Total Child Cancer Risk Across All Exposure Routes/Pathways: 1.8E-06

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: 2.5E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1q Child Resident RME Soil at Property 20070
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20070
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	13000	mg/kg	13000	mg/kg	M	1.4E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.1	mg/kg	9.1	mg/kg	M	1.0E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.5E-05
	Barium	430	mg/kg	430	mg/kg	M	4.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	6.4	mg/kg	6.4	mg/kg	M	7.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16800	mg/kg	16800	mg/kg	M	1.8E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	187	mg/kg	187	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	755	mg/kg	755	mg/kg	M	8.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	44.5	mg/kg	44.5	mg/kg	M	4.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	192	mg/kg	192	mg/kg	M	2.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.5E-05
Dermal	Aluminum	13000	mg/kg	13000	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.1	mg/kg	9.1	mg/kg	M	8.4E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.3E-06
	Barium	430	mg/kg	430	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	6.4	mg/kg	6.4	mg/kg	M	2.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16800	mg/kg	16800	mg/kg	M	5.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	187	mg/kg	187	mg/kg	M	5.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	755	mg/kg	755	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	44.5	mg/kg	44.5	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	192	mg/kg	192	mg/kg	M	5.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.3E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	1.6E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	7.2E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.3E-05

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1q Child Resident CTE Soil at Property 20070
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20070
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	13000	mg/kg	13000	mg/kg	M	1.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.1	mg/kg	9.1	mg/kg	M	1.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.7E-06
	Barium	430	mg/kg	430	mg/kg	M	5.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	6.4	mg/kg	6.4	mg/kg	M	8.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16800	mg/kg	16800	mg/kg	M	2.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	187	mg/kg	187	mg/kg	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	755	mg/kg	755	mg/kg	M	9.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	44.5	mg/kg	44.5	mg/kg	M	5.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	192	mg/kg	192	mg/kg	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.7E-06
Dermal	Aluminum	13000	mg/kg	13000	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.1	mg/kg	9.1	mg/kg	M	3.9E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.9E-08
	Barium	430	mg/kg	430	mg/kg	M	6.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	6.4	mg/kg	6.4	mg/kg	M	9.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16800	mg/kg	16800	mg/kg	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	187	mg/kg	187	mg/kg	M	2.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	755	mg/kg	755	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	44.5	mg/kg	44.5	mg/kg	M	6.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	192	mg/kg	192	mg/kg	M	2.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.9E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.8E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	6.8E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.5E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1r Adult Resident RME Soil at Property 20108
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20108
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	826	mg/kg	826	mg/kg	M	3.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	826	mg/kg	826	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1r Adult Resident CTE Soil at Property 20108
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20108
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	826	mg/kg	826	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	826	mg/kg	826	mg/kg	M	4.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1r Child Resident RME Soil at Property 20108
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20108
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	826	mg/kg	826	mg/kg	M	9.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	826	mg/kg	826	mg/kg	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1r Child Resident CTE Soil at Property 20108
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20108
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	826	mg/kg	826	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	826	mg/kg	826	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1s Adult Resident RME Soil at Property 20171
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20171
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	657	mg/kg	657	mg/kg	M	3.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	657	mg/kg	657	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00
										Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1s Adult Resident CTE Soil at Property 20171
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20171
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	657	mg/kg	657	mg/kg	M	3.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	657	mg/kg	657	mg/kg	M	3.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1s Child Resident RME Soil at Property 20171
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20171
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	657	mg/kg	657	mg/kg	M	7.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	657	mg/kg	657	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1s Child Resident CTE Soil at Property 20171
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20171
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	657	mg/kg	657	mg/kg	M	8.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	657	mg/kg	657	mg/kg	M	9.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1t Adult Resident RME Soil at Property 20173
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20173
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	901	mg/kg	901	mg/kg	M	4.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	901	mg/kg	901	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1t Adult Resident CTE Soil at Property 20173
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20173
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	901	mg/kg	901	mg/kg	M	4.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	901	mg/kg	901	mg/kg	M	4.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1t Child Resident RME Soil at Property 20173
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20173
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	901	mg/kg	901	mg/kg	M	9.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	901	mg/kg	901	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1t Child Resident CTE Soil at Property 20173
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20173
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	901	mg/kg	901	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	901	mg/kg	901	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1u Adult Resident RME Soil at Property 20187
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20187
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	422	mg/kg	422	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	422	mg/kg	422	mg/kg	M	7.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1u Adult Resident CTE Soil at Property 20187
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20187
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	422	mg/kg	422	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	422	mg/kg	422	mg/kg	M	2.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1u Child Resident RME Soil at Property 20187
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20187
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	422	mg/kg	422	mg/kg	M	4.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	422	mg/kg	422	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1u Child Resident CTE Soil at Property 20187
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20187
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	422	mg/kg	422	mg/kg	M	5.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	422	mg/kg	422	mg/kg	M	6.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1v Adult Resident RME Soil at Property 20331
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20331
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	20900	mg/kg	20900	mg/kg	M	9.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	15.9	mg/kg	15.9	mg/kg	M	7.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.4	mg/kg	11.4	mg/kg	M	5.4E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.0E-06
	Barium	322	mg/kg	322	mg/kg	M	1.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.5	mg/kg	11.5	mg/kg	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22700	mg/kg	22700	mg/kg	M	1.1E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1126	mg/kg	1126	mg/kg	M	5.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	644	mg/kg	644	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	47.2	mg/kg	47.2	mg/kg	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	110	mg/kg	110	mg/kg	M	5.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.0E-06
Dermal	Aluminum	20900	mg/kg	20900	mg/kg	M	3.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	15.9	mg/kg	15.9	mg/kg	M	3.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.4	mg/kg	11.4	mg/kg	M	6.4E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.6E-07
	Barium	322	mg/kg	322	mg/kg	M	6.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.5	mg/kg	11.5	mg/kg	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22700	mg/kg	22700	mg/kg	M	4.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1126	mg/kg	1126	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	644	mg/kg	644	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	47.2	mg/kg	47.2	mg/kg	M	8.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	110	mg/kg	110	mg/kg	M	2.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.6E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	9.0E-06
										Total Child Cancer Risk Across All Exposure Routes/Pathways	2.0E-05
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.9E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1v Adult Resident CTE Soil at Property 20331
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20331
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	20900	mg/kg	20900	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	15.9	mg/kg	15.9	mg/kg	M	7.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.4	mg/kg	11.4	mg/kg	M	5.5E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.2E-07
	Barium	322	mg/kg	322	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.5	mg/kg	11.5	mg/kg	M	5.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22700	mg/kg	22700	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1126	mg/kg	1126	mg/kg	M	5.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	644	mg/kg	644	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	47.2	mg/kg	47.2	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	110	mg/kg	110	mg/kg	M	5.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.2E-07
Dermal	Aluminum	20900	mg/kg	20900	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	15.9	mg/kg	15.9	mg/kg	M	8.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.4	mg/kg	11.4	mg/kg	M	1.9E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.8E-08
	Barium	322	mg/kg	322	mg/kg	M	1.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.5	mg/kg	11.5	mg/kg	M	6.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22700	mg/kg	22700	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1126	mg/kg	1126	mg/kg	M	6.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	644	mg/kg	644	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	47.2	mg/kg	47.2	mg/kg	M	2.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	110	mg/kg	110	mg/kg	M	6.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.8E-08

Total Cancer Risk Across All Exposure Routes/Pathways: 8.5E-07

Total Child Cancer Risk Across All Exposure Routes/Pathways: 2.3E-06

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: 3.1E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1v Child Resident RME Soil at Property 20331
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20331
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	20900	mg/kg	20900	mg/kg	M	2.3E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	15.9	mg/kg	15.9	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.4	mg/kg	11.4	mg/kg	M	1.2E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.9E-05
	Barium	322	mg/kg	322	mg/kg	M	3.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.5	mg/kg	11.5	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22700	mg/kg	22700	mg/kg	M	2.5E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1126	mg/kg	1126	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	644	mg/kg	644	mg/kg	M	7.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	47.2	mg/kg	47.2	mg/kg	M	5.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	110	mg/kg	110	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.9E-05
Dermal	Aluminum	20900	mg/kg	20900	mg/kg	M	6.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	15.9	mg/kg	15.9	mg/kg	M	4.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.4	mg/kg	11.4	mg/kg	M	1.0E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.6E-06
	Barium	322	mg/kg	322	mg/kg	M	9.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.5	mg/kg	11.5	mg/kg	M	3.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22700	mg/kg	22700	mg/kg	M	7.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1126	mg/kg	1126	mg/kg	M	3.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	644	mg/kg	644	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	47.2	mg/kg	47.2	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	110	mg/kg	110	mg/kg	M	3.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.6E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	2.0E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	9.0E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.9E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1v Child Resident CTE Soil at Property 20331
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20331
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	20900	mg/kg	20900	mg/kg	M	2.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	15.9	mg/kg	15.9	mg/kg	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.4	mg/kg	11.4	mg/kg	M	1.5E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.2E-06
	Barium	322	mg/kg	322	mg/kg	M	4.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.5	mg/kg	11.5	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22700	mg/kg	22700	mg/kg	M	2.9E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1126	mg/kg	1126	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	644	mg/kg	644	mg/kg	M	8.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	47.2	mg/kg	47.2	mg/kg	M	6.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	110	mg/kg	110	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.2E-06
Dermal	Aluminum	20900	mg/kg	20900	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	15.9	mg/kg	15.9	mg/kg	M	2.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.4	mg/kg	11.4	mg/kg	M	4.9E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.3E-08
	Barium	322	mg/kg	322	mg/kg	M	4.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.5	mg/kg	11.5	mg/kg	M	1.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	22700	mg/kg	22700	mg/kg	M	3.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1126	mg/kg	1126	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	644	mg/kg	644	mg/kg	M	9.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	47.2	mg/kg	47.2	mg/kg	M	6.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	110	mg/kg	110	mg/kg	M	1.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.3E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	2.3E-06
										Total Adult Cancer Risk Across All Exposure Routes/Pathways	8.5E-07
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.1E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1w Adult Resident RME Soil at Property 20349
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20349
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11700	mg/kg	11700	mg/kg	M	5.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	15.3	mg/kg	15.3	mg/kg	M	7.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.1E-05
	Barium	235	mg/kg	235	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.4	mg/kg	4.4	mg/kg	M	2.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	6.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	24200	mg/kg	24200	mg/kg	M	1.1E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1130	mg/kg	1130	mg/kg	M	5.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	833	mg/kg	833	mg/kg	M	3.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	34	mg/kg	34	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	426	mg/kg	426	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.1E-05
Dermal	Aluminum	11700	mg/kg	11700	mg/kg	M	2.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	15.3	mg/kg	15.3	mg/kg	M	8.6E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.3E-06
	Barium	235	mg/kg	235	mg/kg	M	4.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.4	mg/kg	4.4	mg/kg	M	8.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	24200	mg/kg	24200	mg/kg	M	4.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1130	mg/kg	1130	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	833	mg/kg	833	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	34	mg/kg	34	mg/kg	M	6.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	426	mg/kg	426	mg/kg	M	8.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.3E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	1.2E-05
										Total Child Cancer Risk Across All Exposure Routes/Pathways	2.7E-05
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.9E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1w Adult Resident CTE Soil at Property 20349
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20349
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11700	mg/kg	11700	mg/kg	M	5.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	15.3	mg/kg	15.3	mg/kg	M	7.3E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.1E-06
	Barium	235	mg/kg	235	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.4	mg/kg	4.4	mg/kg	M	2.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	6.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	24200	mg/kg	24200	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1130	mg/kg	1130	mg/kg	M	5.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	833	mg/kg	833	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	34	mg/kg	34	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	426	mg/kg	426	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.1E-06
Dermal	Aluminum	11700	mg/kg	11700	mg/kg	M	6.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	15.3	mg/kg	15.3	mg/kg	M	2.5E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.8E-08
	Barium	235	mg/kg	235	mg/kg	M	1.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.4	mg/kg	4.4	mg/kg	M	2.4E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	7.0E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	24200	mg/kg	24200	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1130	mg/kg	1130	mg/kg	M	6.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	833	mg/kg	833	mg/kg	M	4.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	34	mg/kg	34	mg/kg	M	1.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	426	mg/kg	426	mg/kg	M	2.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										3.8E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.1E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	3.0E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	4.2E-06

Table 8.1w Child Resident RME Soil at Property 20349
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20349
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11700	mg/kg	11700	mg/kg	M	1.3E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	15.3	mg/kg	15.3	mg/kg	M	1.7E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.5E-05
	Barium	235	mg/kg	235	mg/kg	M	2.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.4	mg/kg	4.4	mg/kg	M	4.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	24200	mg/kg	24200	mg/kg	M	2.7E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1130	mg/kg	1130	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	833	mg/kg	833	mg/kg	M	9.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	34	mg/kg	34	mg/kg	M	3.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	426	mg/kg	426	mg/kg	M	4.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.5E-05
Dermal	Aluminum	11700	mg/kg	11700	mg/kg	M	3.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	15.3	mg/kg	15.3	mg/kg	M	1.4E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.1E-06
	Barium	235	mg/kg	235	mg/kg	M	7.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.4	mg/kg	4.4	mg/kg	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	3.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	24200	mg/kg	24200	mg/kg	M	7.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1130	mg/kg	1130	mg/kg	M	3.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	833	mg/kg	833	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	34	mg/kg	34	mg/kg	M	1.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	426	mg/kg	426	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.1E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	2.7E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	1.2E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.9E-05

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1w Child Resident CTE Soil at Property 20349
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20349
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11700	mg/kg	11700	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	15.3	mg/kg	15.3	mg/kg	M	2.0E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.9E-06
	Barium	235	mg/kg	235	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.4	mg/kg	4.4	mg/kg	M	5.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	24200	mg/kg	24200	mg/kg	M	3.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1130	mg/kg	1130	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	833	mg/kg	833	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	34	mg/kg	34	mg/kg	M	4.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	426	mg/kg	426	mg/kg	M	5.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.9E-06
Dermal	Aluminum	11700	mg/kg	11700	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	15.3	mg/kg	15.3	mg/kg	M	6.6E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.9E-08
	Barium	235	mg/kg	235	mg/kg	M	3.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4.4	mg/kg	4.4	mg/kg	M	6.3E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	1.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	24200	mg/kg	24200	mg/kg	M	3.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1130	mg/kg	1130	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	833	mg/kg	833	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	34	mg/kg	34	mg/kg	M	4.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	426	mg/kg	426	mg/kg	M	6.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.9E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	3.0E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	1.1E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	4.2E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1x Adult Resident RME Soil at Property 20397
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20397
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	852	mg/kg	852	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	852	mg/kg	852	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1x Adult Resident CTE Soil at Property 20397
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20397
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	852	mg/kg	852	mg/kg	M	4.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	852	mg/kg	852	mg/kg	M	4.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1x Child Resident RME Soil at Property 20397
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20397
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	852	mg/kg	852	mg/kg	M	9.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	852	mg/kg	852	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1x Child Resident CTE Soil at Property 20397
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20397
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	852	mg/kg	852	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	852	mg/kg	852	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1y Adult Resident RME Soil at Property 20428
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20428
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	833	mg/kg	833	mg/kg	M	3.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	833	mg/kg	833	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1y Adult Resident CTE Soil at Property 20428
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20428
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	833	mg/kg	833	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	833	mg/kg	833	mg/kg	M	4.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1y Child Resident RME Soil at Property 20428
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20428
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	833	mg/kg	833	mg/kg	M	9.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	833	mg/kg	833	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1y Child Resident CTE Soil at Property 20428
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20428
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	833	mg/kg	833	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	833	mg/kg	833	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1z Adult Resident RME Soil at Property 20437
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1386	mg/kg	1386	mg/kg	M	6.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1386	mg/kg	1386	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00
Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1z Adult Resident CTE Soil at Property 20437
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1386	mg/kg	1386	mg/kg	M	6.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1386	mg/kg	1386	mg/kg	M	7.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1z Child Resident RME Soil at Property 20437
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1386	mg/kg	1386	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1386	mg/kg	1386	mg/kg	M	4.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1z Child Resident CTE Soil at Property 20437
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1386	mg/kg	1386	mg/kg	M	1.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1386	mg/kg	1386	mg/kg	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1aa Adult Resident RME Soil at Property 20758
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20758
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	76	mg/kg	76	mg/kg	M	3.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	76	mg/kg	76	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1aa Adult Resident CTE Soil at Property 20758
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20758
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	76	mg/kg	76	mg/kg	M	3.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	76	mg/kg	76	mg/kg	M	4.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1aa Child Resident RME Soil at Property 20758
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20758
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	76	mg/kg	76	mg/kg	M	8.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	76	mg/kg	76	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1aa Child Resident CTE Soil at Property 20758
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20758
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	76	mg/kg	76	mg/kg	M	9.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	76	mg/kg	76	mg/kg	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1bb Adult Resident RME Soil at Property 20767
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	486	mg/kg	486	mg/kg	M	2.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	486	mg/kg	486	mg/kg	M	9.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1bb Adult Resident CTE Soil at Property 20767
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	486	mg/kg	486	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	486	mg/kg	486	mg/kg	M	2.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1bb Child Resident RME Soil at Property 20767
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	486	mg/kg	486	mg/kg	M	5.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	486	mg/kg	486	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1bb Child Resident CTE Soil at Property 20767
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	486	mg/kg	486	mg/kg	M	6.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	486	mg/kg	486	mg/kg	M	7.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1cc Adult Resident RME Soil at Property 20918
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20918
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9200	mg/kg	9200	mg/kg	M	4.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.7	mg/kg	6.7	mg/kg	M	3.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.5	mg/kg	11.5	mg/kg	M	5.4E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.1E-06
	Barium	1400	mg/kg	1400	mg/kg	M	6.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.6	mg/kg	8.6	mg/kg	M	4.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	6.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	27200	mg/kg	27200	mg/kg	M	1.3E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1309	mg/kg	1309	mg/kg	M	6.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	812	mg/kg	812	mg/kg	M	3.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	27.1	mg/kg	27.1	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1420	mg/kg	1420	mg/kg	M	6.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.1E-06
Dermal	Aluminum	9200	mg/kg	9200	mg/kg	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.7	mg/kg	6.7	mg/kg	M	1.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.5	mg/kg	11.5	mg/kg	M	6.5E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.7E-07
	Barium	1400	mg/kg	1400	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.6	mg/kg	8.6	mg/kg	M	1.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	27200	mg/kg	27200	mg/kg	M	5.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1309	mg/kg	1309	mg/kg	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	812	mg/kg	812	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	27.1	mg/kg	27.1	mg/kg	M	5.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1420	mg/kg	1420	mg/kg	M	2.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.7E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	9.1E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	2.0E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.0E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1cc Adult Resident CTE Soil at Property 20918
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20918
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9200	mg/kg	9200	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.7	mg/kg	6.7	mg/kg	M	3.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.5	mg/kg	11.5	mg/kg	M	5.5E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.3E-07
	Barium	1400	mg/kg	1400	mg/kg	M	6.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.6	mg/kg	8.6	mg/kg	M	4.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	6.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	27200	mg/kg	27200	mg/kg	M	1.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1309	mg/kg	1309	mg/kg	M	6.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	812	mg/kg	812	mg/kg	M	3.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	27.1	mg/kg	27.1	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1420	mg/kg	1420	mg/kg	M	6.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.3E-07
Dermal	Aluminum	9200	mg/kg	9200	mg/kg	M	5.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.7	mg/kg	6.7	mg/kg	M	3.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.5	mg/kg	11.5	mg/kg	M	1.9E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.8E-08
	Barium	1400	mg/kg	1400	mg/kg	M	7.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.6	mg/kg	8.6	mg/kg	M	4.7E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	7.0E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	27200	mg/kg	27200	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1309	mg/kg	1309	mg/kg	M	7.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	812	mg/kg	812	mg/kg	M	4.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	27.1	mg/kg	27.1	mg/kg	M	1.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1420	mg/kg	1420	mg/kg	M	7.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.8E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	8.6E-07
										Total Child Cancer Risk Across All Exposure Routes/Pathways	2.3E-06
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.1E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1cc Child Resident RME Soil at Property 20918
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20918
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9200	mg/kg	9200	mg/kg	M	1.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.7	mg/kg	6.7	mg/kg	M	7.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.5	mg/kg	11.5	mg/kg	M	1.3E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.9E-05
	Barium	1400	mg/kg	1400	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.6	mg/kg	8.6	mg/kg	M	9.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	27200	mg/kg	27200	mg/kg	M	3.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1309	mg/kg	1309	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	812	mg/kg	812	mg/kg	M	8.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	27.1	mg/kg	27.1	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1420	mg/kg	1420	mg/kg	M	1.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.9E-05
Dermal	Aluminum	9200	mg/kg	9200	mg/kg	M	2.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.7	mg/kg	6.7	mg/kg	M	2.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.5	mg/kg	11.5	mg/kg	M	1.1E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.6E-06
	Barium	1400	mg/kg	1400	mg/kg	M	4.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.6	mg/kg	8.6	mg/kg	M	2.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	3.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	27200	mg/kg	27200	mg/kg	M	8.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1309	mg/kg	1309	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	812	mg/kg	812	mg/kg	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	27.1	mg/kg	27.1	mg/kg	M	8.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1420	mg/kg	1420	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.6E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	2.0E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	9.1E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.0E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1cc Child Resident CTE Soil at Property 20918
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 20918
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9200	mg/kg	9200	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.7	mg/kg	6.7	mg/kg	M	8.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.5	mg/kg	11.5	mg/kg	M	1.5E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.2E-06
	Barium	1400	mg/kg	1400	mg/kg	M	1.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.6	mg/kg	8.6	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	27200	mg/kg	27200	mg/kg	M	3.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1309	mg/kg	1309	mg/kg	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	812	mg/kg	812	mg/kg	M	1.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	27.1	mg/kg	27.1	mg/kg	M	3.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1420	mg/kg	1420	mg/kg	M	1.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.2E-06
Dermal	Aluminum	9200	mg/kg	9200	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.7	mg/kg	6.7	mg/kg	M	9.6E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.5	mg/kg	11.5	mg/kg	M	4.9E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.4E-08
	Barium	1400	mg/kg	1400	mg/kg	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.6	mg/kg	8.6	mg/kg	M	1.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	12.8	mg/kg	12.8	mg/kg	M	1.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	27200	mg/kg	27200	mg/kg	M	3.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1309	mg/kg	1309	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	812	mg/kg	812	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	27.1	mg/kg	27.1	mg/kg	M	3.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1420	mg/kg	1420	mg/kg	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.4E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	2.3E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	8.6E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.1E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1dd Adult Resident RME Soil at Property 23264
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	434	mg/kg	434	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	434	mg/kg	434	mg/kg	M	8.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1dd Adult Resident CTE Soil at Property 23264
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	434	mg/kg	434	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	434	mg/kg	434	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1dd Child Resident RME Soil at Property 23264
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	434	mg/kg	434	mg/kg	M	4.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	434	mg/kg	434	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1dd Child Resident CTE Soil at Property 23264
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	434	mg/kg	434	mg/kg	M	5.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	434	mg/kg	434	mg/kg	M	6.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ee Adult Resident RME Soil at Property 23378
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	5770	mg/kg	5770	mg/kg	M	2.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	23.3	mg/kg	23.3	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6	mg/kg	6	mg/kg	M	2.8E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.2E-06
	Barium	940	mg/kg	940	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	11.6	mg/kg	11.6	mg/kg	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	34.9	mg/kg	34.9	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	1.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	4252	mg/kg	4252	mg/kg	M	2.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	2570	mg/kg	2570	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	9.8	mg/kg	9.8	mg/kg	M	4.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	672	mg/kg	672	mg/kg	M	3.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.2E-06
Dermal	Aluminum	5770	mg/kg	5770	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	23.3	mg/kg	23.3	mg/kg	M	4.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6	mg/kg	6	mg/kg	M	3.4E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.1E-07
	Barium	940	mg/kg	940	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	11.6	mg/kg	11.6	mg/kg	M	2.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	34.9	mg/kg	34.9	mg/kg	M	6.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	4.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	4252	mg/kg	4252	mg/kg	M	8.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	2570	mg/kg	2570	mg/kg	M	4.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	9.8	mg/kg	9.8	mg/kg	M	1.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	672	mg/kg	672	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.1E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	4.7E-06
										Total Child Cancer Risk Across All Exposure Routes/Pathways	1.1E-05
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ee Adult Resident CTE Soil at Property 23378
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	5770	mg/kg	5770	mg/kg	M	2.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	23.3	mg/kg	23.3	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6	mg/kg	6	mg/kg	M	2.9E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.3E-07
	Barium	940	mg/kg	940	mg/kg	M	4.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	11.6	mg/kg	11.6	mg/kg	M	5.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	34.9	mg/kg	34.9	mg/kg	M	1.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	4252	mg/kg	4252	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	2570	mg/kg	2570	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	9.8	mg/kg	9.8	mg/kg	M	4.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	672	mg/kg	672	mg/kg	M	3.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.3E-07
Dermal	Aluminum	5770	mg/kg	5770	mg/kg	M	3.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	23.3	mg/kg	23.3	mg/kg	M	1.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6	mg/kg	6	mg/kg	M	9.8E-09	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.5E-08
	Barium	940	mg/kg	940	mg/kg	M	5.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	11.6	mg/kg	11.6	mg/kg	M	6.3E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	34.9	mg/kg	34.9	mg/kg	M	1.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	4252	mg/kg	4252	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	2570	mg/kg	2570	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	9.8	mg/kg	9.8	mg/kg	M	5.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	672	mg/kg	672	mg/kg	M	3.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.5E-08

Total Cancer Risk Across All Exposure Routes/Pathways	4.5E-07
Total Child Cancer Risk Across All Exposure Routes/Pathways	1.2E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1ee Child Resident RME Soil at Property 23378
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	5770	mg/kg	5770	mg/kg	M	6.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	23.3	mg/kg	23.3	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6	mg/kg	6	mg/kg	M	6.6E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.9E-06
	Barium	940	mg/kg	940	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	11.6	mg/kg	11.6	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	34.9	mg/kg	34.9	mg/kg	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	2.4E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	4252	mg/kg	4252	mg/kg	M	4.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	2570	mg/kg	2570	mg/kg	M	2.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	9.8	mg/kg	9.8	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	672	mg/kg	672	mg/kg	M	7.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.9E-06
Dermal	Aluminum	5770	mg/kg	5770	mg/kg	M	1.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	23.3	mg/kg	23.3	mg/kg	M	7.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6	mg/kg	6	mg/kg	M	5.5E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.3E-07
	Barium	940	mg/kg	940	mg/kg	M	2.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	11.6	mg/kg	11.6	mg/kg	M	3.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	34.9	mg/kg	34.9	mg/kg	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	6.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	4252	mg/kg	4252	mg/kg	M	1.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	2570	mg/kg	2570	mg/kg	M	7.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	9.8	mg/kg	9.8	mg/kg	M	3.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	672	mg/kg	672	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.3E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	1.1E-05
										Total Adult Cancer Risk Across All Exposure Routes/Pathways	4.7E-06
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ee Child Resident CTE Soil at Property 23378
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	5770	mg/kg	5770	mg/kg	M	7.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	23.3	mg/kg	23.3	mg/kg	M	3.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6	mg/kg	6	mg/kg	M	7.7E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.2E-06
	Barium	940	mg/kg	940	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	11.6	mg/kg	11.6	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	34.9	mg/kg	34.9	mg/kg	M	4.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	2.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	4252	mg/kg	4252	mg/kg	M	5.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	2570	mg/kg	2570	mg/kg	M	3.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	9.8	mg/kg	9.8	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	672	mg/kg	672	mg/kg	M	8.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.2E-06
Dermal	Aluminum	5770	mg/kg	5770	mg/kg	M	8.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	23.3	mg/kg	23.3	mg/kg	M	3.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6	mg/kg	6	mg/kg	M	2.6E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.9E-08
	Barium	940	mg/kg	940	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	11.6	mg/kg	11.6	mg/kg	M	1.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	34.9	mg/kg	34.9	mg/kg	M	5.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	4252	mg/kg	4252	mg/kg	M	6.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	2570	mg/kg	2570	mg/kg	M	3.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	9.8	mg/kg	9.8	mg/kg	M	1.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	672	mg/kg	672	mg/kg	M	9.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										3.9E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.2E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	4.5E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ff Adult Resident RME Soil at Property 23575
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	180	mg/kg	180	mg/kg	M	8.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	180	mg/kg	180	mg/kg	M	3.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1ff Adult Resident CTE Soil at Property 23575
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	180	mg/kg	180	mg/kg	M	8.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	180	mg/kg	180	mg/kg	M	9.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1ff Child Resident RME Soil at Property 23575
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	180	mg/kg	180	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	180	mg/kg	180	mg/kg	M	5.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1ff Child Resident CTE Soil at Property 23575
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	180	mg/kg	180	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	180	mg/kg	180	mg/kg	M	2.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1gg Adult Resident RME Soil at Property 30079
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9750	mg/kg	9750	mg/kg	M	4.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	2.7E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.0E-06
	Barium	278	mg/kg	278	mg/kg	M	1.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.2	mg/kg	2.2	mg/kg	M	1.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.1	mg/kg	11.1	mg/kg	M	5.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14000	mg/kg	14000	mg/kg	M	6.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	276	mg/kg	276	mg/kg	M	1.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1310	mg/kg	1310	mg/kg	M	6.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25.7	mg/kg	25.7	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	449	mg/kg	449	mg/kg	M	2.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.0E-06
Dermal	Aluminum	9750	mg/kg	9750	mg/kg	M	1.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	3.2E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.8E-07
	Barium	278	mg/kg	278	mg/kg	M	5.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.2	mg/kg	2.2	mg/kg	M	4.1E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.1	mg/kg	11.1	mg/kg	M	2.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14000	mg/kg	14000	mg/kg	M	2.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	276	mg/kg	276	mg/kg	M	5.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1310	mg/kg	1310	mg/kg	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25.7	mg/kg	25.7	mg/kg	M	4.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	449	mg/kg	449	mg/kg	M	8.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.8E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	4.5E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.0E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1gg Adult Resident CTE Soil at Property 30079
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9750	mg/kg	9750	mg/kg	M	4.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	2.7E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.1E-07
	Barium	278	mg/kg	278	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.2	mg/kg	2.2	mg/kg	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.1	mg/kg	11.1	mg/kg	M	5.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14000	mg/kg	14000	mg/kg	M	6.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	276	mg/kg	276	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1310	mg/kg	1310	mg/kg	M	6.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25.7	mg/kg	25.7	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	449	mg/kg	449	mg/kg	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.1E-07
Dermal	Aluminum	9750	mg/kg	9750	mg/kg	M	5.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	9.3E-09	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.4E-08
	Barium	278	mg/kg	278	mg/kg	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.2	mg/kg	2.2	mg/kg	M	1.2E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.1	mg/kg	11.1	mg/kg	M	6.1E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14000	mg/kg	14000	mg/kg	M	7.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	276	mg/kg	276	mg/kg	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1310	mg/kg	1310	mg/kg	M	7.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25.7	mg/kg	25.7	mg/kg	M	1.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	449	mg/kg	449	mg/kg	M	2.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.4E-08

Total Cancer Risk Across All Exposure Routes/Pathways: 4.2E-07

Total Child Cancer Risk Across All Exposure Routes/Pathways: 1.1E-06

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: 1.6E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1gg Child Resident RME Soil at Property 30079
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9750	mg/kg	9750	mg/kg	M	1.1E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	6.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.4E-06
	Barium	278	mg/kg	278	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.2	mg/kg	2.2	mg/kg	M	2.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.1	mg/kg	11.1	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14000	mg/kg	14000	mg/kg	M	1.5E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	276	mg/kg	276	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1310	mg/kg	1310	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25.7	mg/kg	25.7	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	449	mg/kg	449	mg/kg	M	4.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.4E-06
Dermal	Aluminum	9750	mg/kg	9750	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	5.2E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.9E-07
	Barium	278	mg/kg	278	mg/kg	M	8.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.2	mg/kg	2.2	mg/kg	M	6.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.1	mg/kg	11.1	mg/kg	M	3.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14000	mg/kg	14000	mg/kg	M	4.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	276	mg/kg	276	mg/kg	M	8.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1310	mg/kg	1310	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25.7	mg/kg	25.7	mg/kg	M	7.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	449	mg/kg	449	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.9E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	1.0E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	4.5E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1gg Child Resident CTE Soil at Property 30079
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	9750	mg/kg	9750	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	7.3E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.1E-06
	Barium	278	mg/kg	278	mg/kg	M	3.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.2	mg/kg	2.2	mg/kg	M	2.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.1	mg/kg	11.1	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14000	mg/kg	14000	mg/kg	M	1.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	276	mg/kg	276	mg/kg	M	3.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1310	mg/kg	1310	mg/kg	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25.7	mg/kg	25.7	mg/kg	M	3.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	449	mg/kg	449	mg/kg	M	5.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.1E-06
Dermal	Aluminum	9750	mg/kg	9750	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.7	mg/kg	5.7	mg/kg	M	2.4E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.7E-08
	Barium	278	mg/kg	278	mg/kg	M	4.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	2.2	mg/kg	2.2	mg/kg	M	3.2E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.1	mg/kg	11.1	mg/kg	M	1.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14000	mg/kg	14000	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	276	mg/kg	276	mg/kg	M	4.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1310	mg/kg	1310	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	25.7	mg/kg	25.7	mg/kg	M	3.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	449	mg/kg	449	mg/kg	M	6.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										3.7E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.1E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	4.2E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1hh Adult Resident RME Soil at Property 30126
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30126
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12200	mg/kg	12200	mg/kg	M	5.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.3	mg/kg	4.3	mg/kg	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.9	mg/kg	5.9	mg/kg	M	2.8E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.2E-06
	Barium	4690	mg/kg	4690	mg/kg	M	2.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.6	mg/kg	1.6	mg/kg	M	7.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5	mg/kg	5	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19900	mg/kg	19900	mg/kg	M	9.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	442	mg/kg	442	mg/kg	M	2.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	754	mg/kg	754	mg/kg	M	3.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.5	mg/kg	24.5	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	101	mg/kg	101	mg/kg	M	4.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.2E-06
Dermal	Aluminum	12200	mg/kg	12200	mg/kg	M	2.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.3	mg/kg	4.3	mg/kg	M	8.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.9	mg/kg	5.9	mg/kg	M	3.3E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.0E-07
	Barium	4690	mg/kg	4690	mg/kg	M	8.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.6	mg/kg	1.6	mg/kg	M	3.0E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5	mg/kg	5	mg/kg	M	9.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19900	mg/kg	19900	mg/kg	M	3.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	442	mg/kg	442	mg/kg	M	8.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	754	mg/kg	754	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.5	mg/kg	24.5	mg/kg	M	4.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	101	mg/kg	101	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.0E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	4.7E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.1E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1hh Adult Resident CTE Soil at Property 30126
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30126
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12200	mg/kg	12200	mg/kg	M	5.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.3	mg/kg	4.3	mg/kg	M	2.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.9	mg/kg	5.9	mg/kg	M	2.8E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.2E-07
	Barium	4690	mg/kg	4690	mg/kg	M	2.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.6	mg/kg	1.6	mg/kg	M	7.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5	mg/kg	5	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19900	mg/kg	19900	mg/kg	M	9.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	442	mg/kg	442	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	754	mg/kg	754	mg/kg	M	3.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.5	mg/kg	24.5	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	101	mg/kg	101	mg/kg	M	4.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.2E-07
Dermal	Aluminum	12200	mg/kg	12200	mg/kg	M	6.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.3	mg/kg	4.3	mg/kg	M	2.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.9	mg/kg	5.9	mg/kg	M	9.7E-09	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.5E-08
	Barium	4690	mg/kg	4690	mg/kg	M	2.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.6	mg/kg	1.6	mg/kg	M	8.7E-11	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5	mg/kg	5	mg/kg	M	2.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19900	mg/kg	19900	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	442	mg/kg	442	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	754	mg/kg	754	mg/kg	M	4.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.5	mg/kg	24.5	mg/kg	M	1.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	101	mg/kg	101	mg/kg	M	5.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.5E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	4.4E-07
										Total Child Cancer Risk Across All Exposure Routes/Pathways	1.2E-06
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1hh Child Resident RME Soil at Property 30126
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30126
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12200	mg/kg	12200	mg/kg	M	1.3E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.3	mg/kg	4.3	mg/kg	M	4.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.9	mg/kg	5.9	mg/kg	M	6.5E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.7E-06
	Barium	4690	mg/kg	4690	mg/kg	M	5.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.6	mg/kg	1.6	mg/kg	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5	mg/kg	5	mg/kg	M	5.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19900	mg/kg	19900	mg/kg	M	2.2E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	442	mg/kg	442	mg/kg	M	4.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	754	mg/kg	754	mg/kg	M	8.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.5	mg/kg	24.5	mg/kg	M	2.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	101	mg/kg	101	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.7E-06
Dermal	Aluminum	12200	mg/kg	12200	mg/kg	M	3.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.3	mg/kg	4.3	mg/kg	M	1.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.9	mg/kg	5.9	mg/kg	M	5.4E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.1E-07
	Barium	4690	mg/kg	4690	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.6	mg/kg	1.6	mg/kg	M	4.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5	mg/kg	5	mg/kg	M	1.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19900	mg/kg	19900	mg/kg	M	6.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	442	mg/kg	442	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	754	mg/kg	754	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.5	mg/kg	24.5	mg/kg	M	7.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	101	mg/kg	101	mg/kg	M	3.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.1E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	1.1E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	4.7E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.5E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1hh Child Resident CTE Soil at Property 30126
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30126
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12200	mg/kg	12200	mg/kg	M	1.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.3	mg/kg	4.3	mg/kg	M	5.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.9	mg/kg	5.9	mg/kg	M	7.5E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.1E-06
	Barium	4690	mg/kg	4690	mg/kg	M	6.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.6	mg/kg	1.6	mg/kg	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5	mg/kg	5	mg/kg	M	6.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19900	mg/kg	19900	mg/kg	M	2.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	442	mg/kg	442	mg/kg	M	5.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	754	mg/kg	754	mg/kg	M	9.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.5	mg/kg	24.5	mg/kg	M	3.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	101	mg/kg	101	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.1E-06
Dermal	Aluminum	12200	mg/kg	12200	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.3	mg/kg	4.3	mg/kg	M	6.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	5.9	mg/kg	5.9	mg/kg	M	2.5E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.8E-08
	Barium	4690	mg/kg	4690	mg/kg	M	6.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.6	mg/kg	1.6	mg/kg	M	2.3E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5	mg/kg	5	mg/kg	M	7.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19900	mg/kg	19900	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	442	mg/kg	442	mg/kg	M	6.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	754	mg/kg	754	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	24.5	mg/kg	24.5	mg/kg	M	3.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	101	mg/kg	101	mg/kg	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										3.8E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.2E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	4.4E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.6E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ii Adult Resident RME Soil at Property 30172
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30172
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	693	mg/kg	693	mg/kg	M	3.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	693	mg/kg	693	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ii Adult Resident CTE Soil at Property 30172
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30172
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	693	mg/kg	693	mg/kg	M	3.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	693	mg/kg	693	mg/kg	M	3.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1ii Child Resident RME Soil at Property 30172
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30172
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	693	mg/kg	693	mg/kg	M	7.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	693	mg/kg	693	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ii Child Resident CTE Soil at Property 30172
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30172
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	693	mg/kg	693	mg/kg	M	8.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	693	mg/kg	693	mg/kg	M	9.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1jj Adult Resident RME Soil at Property 30177
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30177
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	16300	mg/kg	16300	mg/kg	M	7.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.4	mg/kg	9.4	mg/kg	M	4.4E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.6E-06
	Barium	447	mg/kg	447	mg/kg	M	2.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	mg/kg	5	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10	mg/kg	10	mg/kg	M	4.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	30800	mg/kg	30800	mg/kg	M	1.4E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	686	mg/kg	686	mg/kg	M	3.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	821	mg/kg	821	mg/kg	M	3.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	36.4	mg/kg	36.4	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	361	mg/kg	361	mg/kg	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.6E-06
Dermal	Aluminum	16300	mg/kg	16300	mg/kg	M	3.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.4	mg/kg	9.4	mg/kg	M	5.3E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.9E-07
	Barium	447	mg/kg	447	mg/kg	M	8.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	mg/kg	5	mg/kg	M	9.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10	mg/kg	10	mg/kg	M	1.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	30800	mg/kg	30800	mg/kg	M	5.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	686	mg/kg	686	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	821	mg/kg	821	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	36.4	mg/kg	36.4	mg/kg	M	6.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	361	mg/kg	361	mg/kg	M	6.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.9E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	7.4E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.7E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.4E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1jj Adult Resident CTE Soil at Property 30177
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30177
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	16300	mg/kg	16300	mg/kg	M	7.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.4	mg/kg	9.4	mg/kg	M	4.5E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.8E-07
	Barium	447	mg/kg	447	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	mg/kg	5	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10	mg/kg	10	mg/kg	M	4.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	30800	mg/kg	30800	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	686	mg/kg	686	mg/kg	M	3.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	821	mg/kg	821	mg/kg	M	3.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	36.4	mg/kg	36.4	mg/kg	M	1.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	361	mg/kg	361	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.8E-07
Dermal	Aluminum	16300	mg/kg	16300	mg/kg	M	8.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.4	mg/kg	9.4	mg/kg	M	1.5E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.3E-08
	Barium	447	mg/kg	447	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	mg/kg	5	mg/kg	M	2.7E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10	mg/kg	10	mg/kg	M	5.5E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	30800	mg/kg	30800	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	686	mg/kg	686	mg/kg	M	3.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	821	mg/kg	821	mg/kg	M	4.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	36.4	mg/kg	36.4	mg/kg	M	2.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	361	mg/kg	361	mg/kg	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.3E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	7.0E-07

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.9E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.6E-06

Table 8.1jj Child Resident RME Soil at Property 30177
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30177
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	16300	mg/kg	16300	mg/kg	M	1.8E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.4	mg/kg	9.4	mg/kg	M	1.0E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.5E-05
	Barium	447	mg/kg	447	mg/kg	M	4.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	mg/kg	5	mg/kg	M	5.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10	mg/kg	10	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	30800	mg/kg	30800	mg/kg	M	3.4E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	686	mg/kg	686	mg/kg	M	7.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	821	mg/kg	821	mg/kg	M	9.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	36.4	mg/kg	36.4	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	361	mg/kg	361	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.5E-05
Dermal	Aluminum	16300	mg/kg	16300	mg/kg	M	5.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.4	mg/kg	9.4	mg/kg	M	8.7E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.3E-06
	Barium	447	mg/kg	447	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	mg/kg	5	mg/kg	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10	mg/kg	10	mg/kg	M	3.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	30800	mg/kg	30800	mg/kg	M	9.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	686	mg/kg	686	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	821	mg/kg	821	mg/kg	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	36.4	mg/kg	36.4	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	361	mg/kg	361	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.3E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	1.7E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	7.4E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.4E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1jj Child Resident CTE Soil at Property 30177
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30177
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	16300	mg/kg	16300	mg/kg	M	2.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.4	mg/kg	9.4	mg/kg	M	1.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.8E-06
	Barium	447	mg/kg	447	mg/kg	M	5.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	mg/kg	5	mg/kg	M	6.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10	mg/kg	10	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	30800	mg/kg	30800	mg/kg	M	3.9E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	686	mg/kg	686	mg/kg	M	8.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	821	mg/kg	821	mg/kg	M	1.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	36.4	mg/kg	36.4	mg/kg	M	4.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	361	mg/kg	361	mg/kg	M	4.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.8E-06
Dermal	Aluminum	16300	mg/kg	16300	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.4	mg/kg	9.4	mg/kg	M	4.0E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.1E-08
	Barium	447	mg/kg	447	mg/kg	M	6.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	mg/kg	5	mg/kg	M	7.2E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10	mg/kg	10	mg/kg	M	1.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	30800	mg/kg	30800	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	686	mg/kg	686	mg/kg	M	9.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	821	mg/kg	821	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	36.4	mg/kg	36.4	mg/kg	M	5.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	361	mg/kg	361	mg/kg	M	5.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.1E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.9E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	7.0E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.6E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1kk Adult Resident RME Soil at Property 30182
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	5.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.7	mg/kg	3.7	mg/kg	M	1.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	4520	mg/kg	4520	mg/kg	M	2.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.1	mg/kg	1.1	mg/kg	M	5.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.3	mg/kg	9.3	mg/kg	M	4.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14200	mg/kg	14200	mg/kg	M	6.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	404	mg/kg	404	mg/kg	M	1.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	962	mg/kg	962	mg/kg	M	4.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	29.6	mg/kg	29.6	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	177	mg/kg	177	mg/kg	M	8.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	2.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.7	mg/kg	3.7	mg/kg	M	6.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	4520	mg/kg	4520	mg/kg	M	8.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.1	mg/kg	1.1	mg/kg	M	2.1E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.3	mg/kg	9.3	mg/kg	M	1.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14200	mg/kg	14200	mg/kg	M	2.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	404	mg/kg	404	mg/kg	M	7.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	962	mg/kg	962	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	29.6	mg/kg	29.6	mg/kg	M	5.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	177	mg/kg	177	mg/kg	M	3.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1kk Adult Resident CTE Soil at Property 30182
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	5.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.7	mg/kg	3.7	mg/kg	M	1.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	4520	mg/kg	4520	mg/kg	M	2.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.1	mg/kg	1.1	mg/kg	M	5.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.3	mg/kg	9.3	mg/kg	M	4.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14200	mg/kg	14200	mg/kg	M	6.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	404	mg/kg	404	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	962	mg/kg	962	mg/kg	M	4.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	29.6	mg/kg	29.6	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	177	mg/kg	177	mg/kg	M	8.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	6.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.7	mg/kg	3.7	mg/kg	M	2.0E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	4520	mg/kg	4520	mg/kg	M	2.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.1	mg/kg	1.1	mg/kg	M	6.0E-11	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.3	mg/kg	9.3	mg/kg	M	5.1E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14200	mg/kg	14200	mg/kg	M	7.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	404	mg/kg	404	mg/kg	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	962	mg/kg	962	mg/kg	M	5.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	29.6	mg/kg	29.6	mg/kg	M	1.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	177	mg/kg	177	mg/kg	M	9.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1kk Child Resident RME Soil at Property 30182
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	1.3E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.7	mg/kg	3.7	mg/kg	M	4.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	4520	mg/kg	4520	mg/kg	M	5.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.1	mg/kg	1.1	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.3	mg/kg	9.3	mg/kg	M	1.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14200	mg/kg	14200	mg/kg	M	1.6E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	404	mg/kg	404	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	962	mg/kg	962	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	29.6	mg/kg	29.6	mg/kg	M	3.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	177	mg/kg	177	mg/kg	M	1.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	3.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.7	mg/kg	3.7	mg/kg	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	4520	mg/kg	4520	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.1	mg/kg	1.1	mg/kg	M	3.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.3	mg/kg	9.3	mg/kg	M	2.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14200	mg/kg	14200	mg/kg	M	4.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	404	mg/kg	404	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	962	mg/kg	962	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	29.6	mg/kg	29.6	mg/kg	M	9.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	177	mg/kg	177	mg/kg	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1kk Child Resident CTE Soil at Property 30182
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.7	mg/kg	3.7	mg/kg	M	4.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	4520	mg/kg	4520	mg/kg	M	5.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.1	mg/kg	1.1	mg/kg	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.3	mg/kg	9.3	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14200	mg/kg	14200	mg/kg	M	1.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	404	mg/kg	404	mg/kg	M	5.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	962	mg/kg	962	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	29.6	mg/kg	29.6	mg/kg	M	3.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	177	mg/kg	177	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.7	mg/kg	3.7	mg/kg	M	5.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	4520	mg/kg	4520	mg/kg	M	6.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.1	mg/kg	1.1	mg/kg	M	1.6E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.3	mg/kg	9.3	mg/kg	M	1.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	14200	mg/kg	14200	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	404	mg/kg	404	mg/kg	M	5.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	962	mg/kg	962	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	29.6	mg/kg	29.6	mg/kg	M	4.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	177	mg/kg	177	mg/kg	M	2.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ll Adult Resident RME Soil at Property 30271
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30271
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	5780	mg/kg	5780	mg/kg	M	2.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.2	mg/kg	6.2	mg/kg	M	2.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1410	mg/kg	1410	mg/kg	M	6.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.3	mg/kg	3.3	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	14.3	mg/kg	14.3	mg/kg	M	6.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16100	mg/kg	16100	mg/kg	M	7.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	926	mg/kg	926	mg/kg	M	4.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1280	mg/kg	1280	mg/kg	M	6.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	15.9	mg/kg	15.9	mg/kg	M	7.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	181	mg/kg	181	mg/kg	M	8.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	5780	mg/kg	5780	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.2	mg/kg	6.2	mg/kg	M	1.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1410	mg/kg	1410	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.3	mg/kg	3.3	mg/kg	M	6.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	14.3	mg/kg	14.3	mg/kg	M	2.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16100	mg/kg	16100	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	926	mg/kg	926	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1280	mg/kg	1280	mg/kg	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	15.9	mg/kg	15.9	mg/kg	M	3.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	181	mg/kg	181	mg/kg	M	3.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ll Adult Resident CTE Soil at Property 30271
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30271
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	5780	mg/kg	5780	mg/kg	M	2.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.2	mg/kg	6.2	mg/kg	M	3.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1410	mg/kg	1410	mg/kg	M	6.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.3	mg/kg	3.3	mg/kg	M	1.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	14.3	mg/kg	14.3	mg/kg	M	6.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16100	mg/kg	16100	mg/kg	M	7.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	926	mg/kg	926	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1280	mg/kg	1280	mg/kg	M	6.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	15.9	mg/kg	15.9	mg/kg	M	7.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	181	mg/kg	181	mg/kg	M	8.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	5780	mg/kg	5780	mg/kg	M	3.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.2	mg/kg	6.2	mg/kg	M	3.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1410	mg/kg	1410	mg/kg	M	7.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.3	mg/kg	3.3	mg/kg	M	1.8E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	14.3	mg/kg	14.3	mg/kg	M	7.8E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16100	mg/kg	16100	mg/kg	M	8.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	926	mg/kg	926	mg/kg	M	5.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1280	mg/kg	1280	mg/kg	M	7.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	15.9	mg/kg	15.9	mg/kg	M	8.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	181	mg/kg	181	mg/kg	M	9.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1ll Child Resident RME Soil at Property 30271
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30271
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	5780	mg/kg	5780	mg/kg	M	6.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.2	mg/kg	6.2	mg/kg	M	6.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1410	mg/kg	1410	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.3	mg/kg	3.3	mg/kg	M	3.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	14.3	mg/kg	14.3	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16100	mg/kg	16100	mg/kg	M	1.8E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	926	mg/kg	926	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1280	mg/kg	1280	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	15.9	mg/kg	15.9	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	181	mg/kg	181	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	5780	mg/kg	5780	mg/kg	M	1.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	6.2	mg/kg	6.2	mg/kg	M	1.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1410	mg/kg	1410	mg/kg	M	4.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.3	mg/kg	3.3	mg/kg	M	1.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	14.3	mg/kg	14.3	mg/kg	M	4.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	16100	mg/kg	16100	mg/kg	M	4.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	926	mg/kg	926	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1280	mg/kg	1280	mg/kg	M	3.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	15.9	mg/kg	15.9	mg/kg	M	4.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	181	mg/kg	181	mg/kg	M	5.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ll Child Resident CTE Soil at Property 30271
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30271
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	5780	mg/kg	5780	mg/kg	M	7.4E-04	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Antimony	6.2	mg/kg	6.2	mg/kg	M	7.9E-07	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	(mg/kg-day)$^{-1}$	NC
	Barium	1410	mg/kg	1410	mg/kg	M	1.8E-04	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Cadmium	3.3	mg/kg	3.3	mg/kg	M	4.2E-07	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Cobalt	14.3	mg/kg	14.3	mg/kg	M	1.8E-06	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Iron	16100	mg/kg	16100	mg/kg	M	2.1E-03	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Lead	926	mg/kg	926	mg/kg	M	1.2E-04	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Manganese	1280	mg/kg	1280	mg/kg	M	1.6E-04	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Vanadium	15.9	mg/kg	15.9	mg/kg	M	2.0E-06	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Zinc	181	mg/kg	181	mg/kg	M	2.3E-05	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	5780	mg/kg	5780	mg/kg	M	8.3E-06	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Antimony	6.2	mg/kg	6.2	mg/kg	M	8.9E-09	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	(mg/kg-day)$^{-1}$	NC
	Barium	1410	mg/kg	1410	mg/kg	M	2.0E-06	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Cadmium	3.3	mg/kg	3.3	mg/kg	M	4.7E-10	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Cobalt	14.3	mg/kg	14.3	mg/kg	M	2.0E-08	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Iron	16100	mg/kg	16100	mg/kg	M	2.3E-05	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Lead	926	mg/kg	926	mg/kg	M	1.3E-06	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Manganese	1280	mg/kg	1280	mg/kg	M	1.8E-06	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Vanadium	15.9	mg/kg	15.9	mg/kg	M	2.3E-08	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	Zinc	181	mg/kg	181	mg/kg	M	2.6E-07	mg/kg-day	NA	(mg/kg-day)$^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1mm Adult Resident RME Soil at Property 30364
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30364
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	18500	mg/kg	18500	mg/kg	M	8.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.5	mg/kg	3.5	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.2	mg/kg	12.2	mg/kg	M	5.7E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.6E-06
	Barium	1010	mg/kg	1010	mg/kg	M	4.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.1	mg/kg	5.1	mg/kg	M	2.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.8	mg/kg	9.8	mg/kg	M	4.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32300	mg/kg	32300	mg/kg	M	1.5E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	842	mg/kg	842	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	748	mg/kg	748	mg/kg	M	3.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	57.5	mg/kg	57.5	mg/kg	M	2.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	337	mg/kg	337	mg/kg	M	1.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.6E-06
Dermal	Aluminum	18500	mg/kg	18500	mg/kg	M	3.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.5	mg/kg	3.5	mg/kg	M	6.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.2	mg/kg	12.2	mg/kg	M	6.9E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.0E-06
	Barium	1010	mg/kg	1010	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.1	mg/kg	5.1	mg/kg	M	9.6E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.8	mg/kg	9.8	mg/kg	M	1.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32300	mg/kg	32300	mg/kg	M	6.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	842	mg/kg	842	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	748	mg/kg	748	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	57.5	mg/kg	57.5	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	337	mg/kg	337	mg/kg	M	6.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.0E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	9.6E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	2.2E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.1E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1mm Adult Resident CTE Soil at Property 30364
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30364
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	18500	mg/kg	18500	mg/kg	M	8.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.5	mg/kg	3.5	mg/kg	M	1.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.2	mg/kg	12.2	mg/kg	M	5.8E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.8E-07
	Barium	1010	mg/kg	1010	mg/kg	M	4.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.1	mg/kg	5.1	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.8	mg/kg	9.8	mg/kg	M	4.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32300	mg/kg	32300	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	842	mg/kg	842	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	748	mg/kg	748	mg/kg	M	3.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	57.5	mg/kg	57.5	mg/kg	M	2.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	337	mg/kg	337	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.8E-07
Dermal	Aluminum	18500	mg/kg	18500	mg/kg	M	1.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.5	mg/kg	3.5	mg/kg	M	1.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.2	mg/kg	12.2	mg/kg	M	2.0E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-08
	Barium	1010	mg/kg	1010	mg/kg	M	5.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.1	mg/kg	5.1	mg/kg	M	2.8E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.8	mg/kg	9.8	mg/kg	M	5.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32300	mg/kg	32300	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	842	mg/kg	842	mg/kg	M	4.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	748	mg/kg	748	mg/kg	M	4.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	57.5	mg/kg	57.5	mg/kg	M	3.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	337	mg/kg	337	mg/kg	M	1.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										3.0E-08

Total Cancer Risk Across All Exposure Routes/Pathways	9.1E-07
Total Child Cancer Risk Across All Exposure Routes/Pathways	2.4E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.3E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1mm Child Resident RME Soil at Property 30364
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30364
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	18500	mg/kg	18500	mg/kg	M	2.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.5	mg/kg	3.5	mg/kg	M	3.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.2	mg/kg	12.2	mg/kg	M	1.3E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05
	Barium	1010	mg/kg	1010	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.1	mg/kg	5.1	mg/kg	M	5.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.8	mg/kg	9.8	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32300	mg/kg	32300	mg/kg	M	3.5E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	842	mg/kg	842	mg/kg	M	9.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	748	mg/kg	748	mg/kg	M	8.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	57.5	mg/kg	57.5	mg/kg	M	6.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	337	mg/kg	337	mg/kg	M	3.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.0E-05
Dermal	Aluminum	18500	mg/kg	18500	mg/kg	M	5.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.5	mg/kg	3.5	mg/kg	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.2	mg/kg	12.2	mg/kg	M	1.1E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.7E-06
	Barium	1010	mg/kg	1010	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.1	mg/kg	5.1	mg/kg	M	1.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.8	mg/kg	9.8	mg/kg	M	3.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32300	mg/kg	32300	mg/kg	M	9.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	842	mg/kg	842	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	748	mg/kg	748	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	57.5	mg/kg	57.5	mg/kg	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	337	mg/kg	337	mg/kg	M	1.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.7E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	2.2E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	9.6E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.1E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1mm Child Resident CTE Soil at Property 30364
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30364
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	18500	mg/kg	18500	mg/kg	M	2.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.5	mg/kg	3.5	mg/kg	M	4.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.2	mg/kg	12.2	mg/kg	M	1.6E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.3E-06
	Barium	1010	mg/kg	1010	mg/kg	M	1.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.1	mg/kg	5.1	mg/kg	M	6.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.8	mg/kg	9.8	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32300	mg/kg	32300	mg/kg	M	4.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	842	mg/kg	842	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	748	mg/kg	748	mg/kg	M	9.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	57.5	mg/kg	57.5	mg/kg	M	7.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	337	mg/kg	337	mg/kg	M	4.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.3E-06
Dermal	Aluminum	18500	mg/kg	18500	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.5	mg/kg	3.5	mg/kg	M	5.0E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	12.2	mg/kg	12.2	mg/kg	M	5.2E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.9E-08
	Barium	1010	mg/kg	1010	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.1	mg/kg	5.1	mg/kg	M	7.3E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	9.8	mg/kg	9.8	mg/kg	M	1.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32300	mg/kg	32300	mg/kg	M	4.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	842	mg/kg	842	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	748	mg/kg	748	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	57.5	mg/kg	57.5	mg/kg	M	8.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	337	mg/kg	337	mg/kg	M	4.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.9E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	2.4E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	9.1E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.3E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1nn Adult Resident RME Soil at Property 30417
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30417
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	8210	mg/kg	8210	mg/kg	M	3.9E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.5	mg/kg	11.5	mg/kg	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6.5	mg/kg	6.5	mg/kg	M	3.1E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.6E-06
	Barium	312	mg/kg	312	mg/kg	M	1.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.5	mg/kg	5.5	mg/kg	M	2.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.8	mg/kg	17.8	mg/kg	M	8.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19100	mg/kg	19100	mg/kg	M	9.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1071	mg/kg	1071	mg/kg	M	5.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1580	mg/kg	1580	mg/kg	M	7.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	17.3	mg/kg	17.3	mg/kg	M	8.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	342	mg/kg	342	mg/kg	M	1.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.6E-06
Dermal	Aluminum	8210	mg/kg	8210	mg/kg	M	1.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.5	mg/kg	11.5	mg/kg	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6.5	mg/kg	6.5	mg/kg	M	3.7E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	5.5E-07
	Barium	312	mg/kg	312	mg/kg	M	5.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.5	mg/kg	5.5	mg/kg	M	1.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.8	mg/kg	17.8	mg/kg	M	3.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19100	mg/kg	19100	mg/kg	M	3.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1071	mg/kg	1071	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1580	mg/kg	1580	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	17.3	mg/kg	17.3	mg/kg	M	3.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	342	mg/kg	342	mg/kg	M	6.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										5.5E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	5.1E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.2E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.7E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1nn Adult Resident CTE Soil at Property 30417
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30417
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	8210	mg/kg	8210	mg/kg	M	3.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.5	mg/kg	11.5	mg/kg	M	5.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6.5	mg/kg	6.5	mg/kg	M	3.1E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.7E-07
	Barium	312	mg/kg	312	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.5	mg/kg	5.5	mg/kg	M	2.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.8	mg/kg	17.8	mg/kg	M	8.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19100	mg/kg	19100	mg/kg	M	9.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1071	mg/kg	1071	mg/kg	M	5.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1580	mg/kg	1580	mg/kg	M	7.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	17.3	mg/kg	17.3	mg/kg	M	8.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	342	mg/kg	342	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.7E-07
Dermal	Aluminum	8210	mg/kg	8210	mg/kg	M	4.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.5	mg/kg	11.5	mg/kg	M	6.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6.5	mg/kg	6.5	mg/kg	M	1.1E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.6E-08
	Barium	312	mg/kg	312	mg/kg	M	1.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.5	mg/kg	5.5	mg/kg	M	3.0E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.8	mg/kg	17.8	mg/kg	M	9.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19100	mg/kg	19100	mg/kg	M	1.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1071	mg/kg	1071	mg/kg	M	5.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1580	mg/kg	1580	mg/kg	M	8.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	17.3	mg/kg	17.3	mg/kg	M	9.5E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	342	mg/kg	342	mg/kg	M	1.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.6E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	4.8E-07

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.3E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.8E-06

Table 8.1nn Child Resident RME Soil at Property 30417
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30417
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	8210	mg/kg	8210	mg/kg	M	9.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.5	mg/kg	11.5	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6.5	mg/kg	6.5	mg/kg	M	7.1E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.1E-05
	Barium	312	mg/kg	312	mg/kg	M	3.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.5	mg/kg	5.5	mg/kg	M	6.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.8	mg/kg	17.8	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19100	mg/kg	19100	mg/kg	M	2.1E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1071	mg/kg	1071	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1580	mg/kg	1580	mg/kg	M	1.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	17.3	mg/kg	17.3	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	342	mg/kg	342	mg/kg	M	3.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.1E-05
Dermal	Aluminum	8210	mg/kg	8210	mg/kg	M	2.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.5	mg/kg	11.5	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6.5	mg/kg	6.5	mg/kg	M	6.0E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.0E-07
	Barium	312	mg/kg	312	mg/kg	M	9.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.5	mg/kg	5.5	mg/kg	M	1.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.8	mg/kg	17.8	mg/kg	M	5.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19100	mg/kg	19100	mg/kg	M	5.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1071	mg/kg	1071	mg/kg	M	3.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1580	mg/kg	1580	mg/kg	M	4.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	17.3	mg/kg	17.3	mg/kg	M	5.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	342	mg/kg	342	mg/kg	M	1.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.0E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	1.2E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	5.1E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.7E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1nn Child Resident CTE Soil at Property 30417
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30417
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	8210	mg/kg	8210	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.5	mg/kg	11.5	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6.5	mg/kg	6.5	mg/kg	M	8.3E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.2E-06
	Barium	312	mg/kg	312	mg/kg	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.5	mg/kg	5.5	mg/kg	M	7.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.8	mg/kg	17.8	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19100	mg/kg	19100	mg/kg	M	2.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1071	mg/kg	1071	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1580	mg/kg	1580	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	17.3	mg/kg	17.3	mg/kg	M	2.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	342	mg/kg	342	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.2E-06
Dermal	Aluminum	8210	mg/kg	8210	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	11.5	mg/kg	11.5	mg/kg	M	1.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	6.5	mg/kg	6.5	mg/kg	M	2.8E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.2E-08
	Barium	312	mg/kg	312	mg/kg	M	4.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5.5	mg/kg	5.5	mg/kg	M	7.9E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	17.8	mg/kg	17.8	mg/kg	M	2.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	19100	mg/kg	19100	mg/kg	M	2.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1071	mg/kg	1071	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1580	mg/kg	1580	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	17.3	mg/kg	17.3	mg/kg	M	2.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	342	mg/kg	342	mg/kg	M	4.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.2E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.3E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	4.8E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	1.8E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1oo Adult Resident RME Soil at Property 30448
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	766	mg/kg	766	mg/kg	M	3.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	766	mg/kg	766	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1oo Adult Resident CTE Soil at Property 30448
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	766	mg/kg	766	mg/kg	M	3.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	766	mg/kg	766	mg/kg	M	4.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1oo Child Resident RME Soil at Property 30448
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	766	mg/kg	766	mg/kg	M	8.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	766	mg/kg	766	mg/kg	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1oo Child Resident CTE Soil at Property 30448
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	766	mg/kg	766	mg/kg	M	9.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	766	mg/kg	766	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1pp Adult Resident RME Soil at Property 30553
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	5.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.7	mg/kg	4.7	mg/kg	M	2.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	5.3E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.0E-06
	Barium	443	mg/kg	443	mg/kg	M	2.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	7.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	18300	mg/kg	18300	mg/kg	M	8.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	719	mg/kg	719	mg/kg	M	3.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	7.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	41	mg/kg	41	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	367	mg/kg	367	mg/kg	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.0E-06
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	2.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.7	mg/kg	4.7	mg/kg	M	8.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	6.4E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	9.5E-07
	Barium	443	mg/kg	443	mg/kg	M	8.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	3.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	18300	mg/kg	18300	mg/kg	M	3.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	719	mg/kg	719	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	41	mg/kg	41	mg/kg	M	7.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	367	mg/kg	367	mg/kg	M	6.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										9.5E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	8.9E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	2.0E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.9E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1pp Adult Resident CTE Soil at Property 30553
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	5.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.7	mg/kg	4.7	mg/kg	M	2.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	5.4E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	8.1E-07
	Barium	443	mg/kg	443	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	7.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	18300	mg/kg	18300	mg/kg	M	8.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	719	mg/kg	719	mg/kg	M	3.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	7.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	41	mg/kg	41	mg/kg	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	367	mg/kg	367	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										8.1E-07
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	6.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.7	mg/kg	4.7	mg/kg	M	2.6E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.9E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.8E-08
	Barium	443	mg/kg	443	mg/kg	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	8.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	18300	mg/kg	18300	mg/kg	M	1.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	719	mg/kg	719	mg/kg	M	3.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	8.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	41	mg/kg	41	mg/kg	M	2.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	367	mg/kg	367	mg/kg	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.8E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	8.4E-07

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	2.2E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.1E-06

Table 8.1pp Child Resident RME Soil at Property 30553
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	1.3E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.7	mg/kg	4.7	mg/kg	M	5.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.2E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.9E-05
	Barium	443	mg/kg	443	mg/kg	M	4.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	18300	mg/kg	18300	mg/kg	M	2.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	719	mg/kg	719	mg/kg	M	7.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	1.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	41	mg/kg	41	mg/kg	M	4.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	367	mg/kg	367	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.9E-05
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	3.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.7	mg/kg	4.7	mg/kg	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.0E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.6E-06
	Barium	443	mg/kg	443	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	5.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	18300	mg/kg	18300	mg/kg	M	5.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	719	mg/kg	719	mg/kg	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	4.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	41	mg/kg	41	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	367	mg/kg	367	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.6E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	2.0E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	8.9E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.9E-05

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1pp Child Resident CTE Soil at Property 30553
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	12000	mg/kg	12000	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.7	mg/kg	4.7	mg/kg	M	6.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	1.4E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.2E-06
	Barium	443	mg/kg	443	mg/kg	M	5.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	2.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	18300	mg/kg	18300	mg/kg	M	2.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	719	mg/kg	719	mg/kg	M	9.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	41	mg/kg	41	mg/kg	M	5.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	367	mg/kg	367	mg/kg	M	4.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.2E-06
Dermal	Aluminum	12000	mg/kg	12000	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.7	mg/kg	4.7	mg/kg	M	6.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	11.3	mg/kg	11.3	mg/kg	M	4.9E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.3E-08
	Barium	443	mg/kg	443	mg/kg	M	6.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	16.3	mg/kg	16.3	mg/kg	M	2.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	18300	mg/kg	18300	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	719	mg/kg	719	mg/kg	M	1.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	1600	mg/kg	1600	mg/kg	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	41	mg/kg	41	mg/kg	M	5.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	367	mg/kg	367	mg/kg	M	5.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.3E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	2.2E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	8.4E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	3.1E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1qq Adult Resident RME Soil at Property 30577
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30577
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	498	mg/kg	498	mg/kg	M	2.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	498	mg/kg	498	mg/kg	M	9.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1qq Adult Resident CTE Soil at Property 30577
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30577
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	498	mg/kg	498	mg/kg	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	498	mg/kg	498	mg/kg	M	2.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1qq Child Resident RME Soil at Property 30577
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30577
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	498	mg/kg	498	mg/kg	M	5.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	498	mg/kg	498	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1qq Child Resident CTE Soil at Property 30577
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30577
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	498	mg/kg	498	mg/kg	M	6.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	498	mg/kg	498	mg/kg	M	7.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1rr Adult Resident RME Soil at Property 30651
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30651
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	22200	mg/kg	22200	mg/kg	M	1.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.1	mg/kg	4.1	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	8.1E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.2E-05
	Barium	391	mg/kg	391	mg/kg	M	1.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	3.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32100	mg/kg	32100	mg/kg	M	1.5E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	913	mg/kg	913	mg/kg	M	4.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	611	mg/kg	611	mg/kg	M	2.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	633	mg/kg	633	mg/kg	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.2E-05
Dermal	Aluminum	22200	mg/kg	22200	mg/kg	M	4.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.1	mg/kg	4.1	mg/kg	M	7.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	9.7E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.5E-06
	Barium	391	mg/kg	391	mg/kg	M	7.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	6.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	1.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32100	mg/kg	32100	mg/kg	M	6.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	913	mg/kg	913	mg/kg	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	611	mg/kg	611	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	633	mg/kg	633	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.5E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	1.4E-05

Total Child Cancer Risk Across All Exposure Routes/Pathways	3.1E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	4.4E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1rr Adult Resident CTE Soil at Property 30651
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30651
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	22200	mg/kg	22200	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.1	mg/kg	4.1	mg/kg	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	8.2E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.2E-06
	Barium	391	mg/kg	391	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32100	mg/kg	32100	mg/kg	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	913	mg/kg	913	mg/kg	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	611	mg/kg	611	mg/kg	M	2.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	2.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	633	mg/kg	633	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.2E-06
Dermal	Aluminum	22200	mg/kg	22200	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.1	mg/kg	4.1	mg/kg	M	2.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	2.8E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.2E-08
	Barium	391	mg/kg	391	mg/kg	M	2.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.9E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	3.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32100	mg/kg	32100	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	913	mg/kg	913	mg/kg	M	5.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	611	mg/kg	611	mg/kg	M	3.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	3.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	633	mg/kg	633	mg/kg	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.2E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.3E-06
										Total Child Cancer Risk Across All Exposure Routes/Pathways	3.4E-06
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	4.7E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1rr Child Resident RME Soil at Property 30651
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30651
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	22200	mg/kg	22200	mg/kg	M	2.4E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.1	mg/kg	4.1	mg/kg	M	4.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	1.9E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.8E-05
	Barium	391	mg/kg	391	mg/kg	M	4.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	3.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	7.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32100	mg/kg	32100	mg/kg	M	3.5E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	913	mg/kg	913	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	611	mg/kg	611	mg/kg	M	6.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	6.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	633	mg/kg	633	mg/kg	M	6.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.8E-05
Dermal	Aluminum	22200	mg/kg	22200	mg/kg	M	6.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.1	mg/kg	4.1	mg/kg	M	1.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	1.6E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.4E-06
	Barium	391	mg/kg	391	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	1.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	2.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32100	mg/kg	32100	mg/kg	M	9.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	913	mg/kg	913	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	611	mg/kg	611	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	1.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	633	mg/kg	633	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.4E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	3.1E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	1.4E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	4.4E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1rr Child Resident CTE Soil at Property 30651
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30651
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	22200	mg/kg	22200	mg/kg	M	2.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.1	mg/kg	4.1	mg/kg	M	5.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	2.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.3E-06
	Barium	391	mg/kg	391	mg/kg	M	5.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	4.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	9.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32100	mg/kg	32100	mg/kg	M	4.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	913	mg/kg	913	mg/kg	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	611	mg/kg	611	mg/kg	M	7.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	7.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	633	mg/kg	633	mg/kg	M	8.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										3.3E-06
Dermal	Aluminum	22200	mg/kg	22200	mg/kg	M	3.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	4.1	mg/kg	4.1	mg/kg	M	5.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	17.2	mg/kg	17.2	mg/kg	M	7.4E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.1E-07
	Barium	391	mg/kg	391	mg/kg	M	5.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3.4	mg/kg	3.4	mg/kg	M	4.9E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	7.2	mg/kg	7.2	mg/kg	M	1.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	32100	mg/kg	32100	mg/kg	M	4.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	913	mg/kg	913	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	611	mg/kg	611	mg/kg	M	8.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	60.4	mg/kg	60.4	mg/kg	M	8.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	633	mg/kg	633	mg/kg	M	9.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.1E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	3.4E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	1.3E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	4.7E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ss Adult Resident RME Soil at Property 30911
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30911
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	18200	mg/kg	18200	mg/kg	M	8.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.2	mg/kg	3.2	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	25	mg/kg	25	mg/kg	M	1.2E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.8E-05
	Barium	602	mg/kg	602	mg/kg	M	2.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	3.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	39100	mg/kg	39100	mg/kg	M	1.8E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	862	mg/kg	862	mg/kg	M	4.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	685	mg/kg	685	mg/kg	M	3.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1150	mg/kg	1150	mg/kg	M	5.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.8E-05
Dermal	Aluminum	18200	mg/kg	18200	mg/kg	M	3.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.2	mg/kg	3.2	mg/kg	M	6.0E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	25	mg/kg	25	mg/kg	M	1.4E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.1E-06
	Barium	602	mg/kg	602	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	1.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	39100	mg/kg	39100	mg/kg	M	7.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	862	mg/kg	862	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	685	mg/kg	685	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1150	mg/kg	1150	mg/kg	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.1E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	2.0E-05

Total Child Cancer Risk Across All Exposure Routes/Pathways	4.5E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	6.4E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ss Adult Resident CTE Soil at Property 30911
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30911
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	18200	mg/kg	18200	mg/kg	M	8.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.2	mg/kg	3.2	mg/kg	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	25	mg/kg	25	mg/kg	M	1.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.8E-06
	Barium	602	mg/kg	602	mg/kg	M	2.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	3.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	5.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	39100	mg/kg	39100	mg/kg	M	1.9E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	862	mg/kg	862	mg/kg	M	4.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	685	mg/kg	685	mg/kg	M	3.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	2.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1150	mg/kg	1150	mg/kg	M	5.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.8E-06
Dermal	Aluminum	18200	mg/kg	18200	mg/kg	M	9.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.2	mg/kg	3.2	mg/kg	M	1.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	25	mg/kg	25	mg/kg	M	4.1E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.1E-08
	Barium	602	mg/kg	602	mg/kg	M	3.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	4.4E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	6.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	39100	mg/kg	39100	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	862	mg/kg	862	mg/kg	M	4.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	685	mg/kg	685	mg/kg	M	3.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	3.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1150	mg/kg	1150	mg/kg	M	6.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.1E-08

Total Cancer Risk Across All Exposure Routes/Pathways: 1.9E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways: 5.0E-06

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: 6.8E-06

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1ss Child Resident RME Soil at Property 30911
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30911
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	18200	mg/kg	18200	mg/kg	M	2.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.2	mg/kg	3.2	mg/kg	M	3.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	25	mg/kg	25	mg/kg	M	2.7E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.1E-05
	Barium	602	mg/kg	602	mg/kg	M	6.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	8.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	39100	mg/kg	39100	mg/kg	M	4.3E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	862	mg/kg	862	mg/kg	M	9.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	685	mg/kg	685	mg/kg	M	7.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	6.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1150	mg/kg	1150	mg/kg	M	1.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.1E-05
Dermal	Aluminum	18200	mg/kg	18200	mg/kg	M	5.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.2	mg/kg	3.2	mg/kg	M	9.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	25	mg/kg	25	mg/kg	M	2.3E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.5E-06
	Barium	602	mg/kg	602	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	2.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	3.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	39100	mg/kg	39100	mg/kg	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	862	mg/kg	862	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	685	mg/kg	685	mg/kg	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1150	mg/kg	1150	mg/kg	M	3.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										3.5E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	4.5E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	2.0E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	6.4E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1ss Child Resident CTE Soil at Property 30911
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30911
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	18200	mg/kg	18200	mg/kg	M	2.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.2	mg/kg	3.2	mg/kg	M	4.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	25	mg/kg	25	mg/kg	M	3.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	4.8E-06
	Barium	602	mg/kg	602	mg/kg	M	7.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	1.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	39100	mg/kg	39100	mg/kg	M	5.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	862	mg/kg	862	mg/kg	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	685	mg/kg	685	mg/kg	M	8.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	7.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1150	mg/kg	1150	mg/kg	M	1.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										4.8E-06
Dermal	Aluminum	18200	mg/kg	18200	mg/kg	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	3.2	mg/kg	3.2	mg/kg	M	4.6E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	25	mg/kg	25	mg/kg	M	1.1E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.6E-07
	Barium	602	mg/kg	602	mg/kg	M	8.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	8.1	mg/kg	8.1	mg/kg	M	1.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	11.6	mg/kg	11.6	mg/kg	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	39100	mg/kg	39100	mg/kg	M	5.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	862	mg/kg	862	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	685	mg/kg	685	mg/kg	M	9.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	59.3	mg/kg	59.3	mg/kg	M	8.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	1150	mg/kg	1150	mg/kg	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.6E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	5.0E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	1.9E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	6.8E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1tt Adult Resident RME Soil at Property 30914
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	5.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	9.5	mg/kg	9.5	mg/kg	M	4.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	4.4E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.6E-06
	Barium	584	mg/kg	584	mg/kg	M	2.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	5.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	2.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	1.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1041	mg/kg	1041	mg/kg	M	4.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	515	mg/kg	515	mg/kg	M	2.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	748	mg/kg	748	mg/kg	M	3.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.6E-06
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	2.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	9.5	mg/kg	9.5	mg/kg	M	1.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	5.2E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	7.8E-07
	Barium	584	mg/kg	584	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	2.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	9.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	4.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1041	mg/kg	1041	mg/kg	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	515	mg/kg	515	mg/kg	M	9.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	5.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	748	mg/kg	748	mg/kg	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										7.8E-07
										Total Cancer Risk Across All Exposure Routes/Pathways	7.3E-06

Total Child Cancer Risk Across All Exposure Routes/Pathways	1.7E-05
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.4E-05

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1tt Adult Resident CTE Soil at Property 30914
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	5.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	9.5	mg/kg	9.5	mg/kg	M	4.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	4.5E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.7E-07
	Barium	584	mg/kg	584	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	5.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	2.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1041	mg/kg	1041	mg/kg	M	5.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	515	mg/kg	515	mg/kg	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	748	mg/kg	748	mg/kg	M	3.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.7E-07
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	6.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	9.5	mg/kg	9.5	mg/kg	M	5.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	1.5E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	2.3E-08
	Barium	584	mg/kg	584	mg/kg	M	3.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	6.6E-11	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	2.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1041	mg/kg	1041	mg/kg	M	5.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	515	mg/kg	515	mg/kg	M	2.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	748	mg/kg	748	mg/kg	M	4.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										2.3E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	6.9E-07
										Total Child Cancer Risk Across All Exposure Routes/Pathways	1.8E-06
										Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.5E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1tt Child Resident RME Soil at Property 30914
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	1.2E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	9.5	mg/kg	9.5	mg/kg	M	1.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	1.0E-05	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.5E-05
	Barium	584	mg/kg	584	mg/kg	M	6.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	5.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	2.4E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1041	mg/kg	1041	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	515	mg/kg	515	mg/kg	M	5.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	3.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	748	mg/kg	748	mg/kg	M	8.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.5E-05
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	3.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	9.5	mg/kg	9.5	mg/kg	M	2.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	8.6E-07	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.3E-06
	Barium	584	mg/kg	584	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	3.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	1.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	6.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1041	mg/kg	1041	mg/kg	M	3.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	515	mg/kg	515	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	9.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	748	mg/kg	748	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.3E-06
										Total Cancer Risk Across All Exposure Routes/Pathways	1.7E-05

Total Adult Cancer Risk Across All Exposure Routes/Pathways	7.3E-06
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.4E-05

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1tt Child Resident CTE Soil at Property 30914
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	11000	mg/kg	11000	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	9.5	mg/kg	9.5	mg/kg	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	1.2E-06	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	1.8E-06
	Barium	584	mg/kg	584	mg/kg	M	7.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	6.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	2.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1041	mg/kg	1041	mg/kg	M	1.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	515	mg/kg	515	mg/kg	M	6.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	4.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	748	mg/kg	748	mg/kg	M	9.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										1.8E-06
Dermal	Aluminum	11000	mg/kg	11000	mg/kg	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	9.5	mg/kg	9.5	mg/kg	M	1.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	9.3	mg/kg	9.3	mg/kg	M	4.0E-08	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	6.0E-08
	Barium	584	mg/kg	584	mg/kg	M	8.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	1.2	mg/kg	1.2	mg/kg	M	1.7E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	5.3	mg/kg	5.3	mg/kg	M	7.6E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	21700	mg/kg	21700	mg/kg	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1041	mg/kg	1041	mg/kg	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	515	mg/kg	515	mg/kg	M	7.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	31.3	mg/kg	31.3	mg/kg	M	4.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	748	mg/kg	748	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										6.0E-08
										Total Cancer Risk Across All Exposure Routes/Pathways	1.8E-06

Total Adult Cancer Risk Across All Exposure Routes/Pathways	6.9E-07
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	2.5E-06

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1uu Adult Resident RME Soil at Property 30965
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	306	mg/kg	306	mg/kg	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	306	mg/kg	306	mg/kg	M	5.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1uu Adult Resident CTE Soil at Property 30965
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	306	mg/kg	306	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	306	mg/kg	306	mg/kg	M	1.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1uu Child Resident RME Soil at Property 30965
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	306	mg/kg	306	mg/kg	M	3.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	306	mg/kg	306	mg/kg	M	9.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1uu Child Resident CTE Soil at Property 30965
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	306	mg/kg	306	mg/kg	M	3.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	306	mg/kg	306	mg/kg	M	4.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	--	mg/kg	--	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1vv Adult Resident RME Soil at Property 31016
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	5.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1240	mg/kg	1240	mg/kg	M	5.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	4.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	13300	mg/kg	13300	mg/kg	M	6.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	372	mg/kg	372	mg/kg	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	988	mg/kg	988	mg/kg	M	4.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	59.4	mg/kg	59.4	mg/kg	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	2.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1240	mg/kg	1240	mg/kg	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	13300	mg/kg	13300	mg/kg	M	2.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	372	mg/kg	372	mg/kg	M	7.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	988	mg/kg	988	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	4.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	59.4	mg/kg	59.4	mg/kg	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00

Total Cancer Risk Across All Exposure Routes/Pathways: 0.0E+00

Total Child Cancer Risk Across All Exposure Routes/Pathways: NC

Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways: NC

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Table 8.1vv Adult Resident CTE Soil at Property 31016
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	5.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1240	mg/kg	1240	mg/kg	M	5.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	5.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	13300	mg/kg	13300	mg/kg	M	6.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	372	mg/kg	372	mg/kg	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	988	mg/kg	988	mg/kg	M	4.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	59.4	mg/kg	59.4	mg/kg	M	2.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	5.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1240	mg/kg	1240	mg/kg	M	6.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	5.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	13300	mg/kg	13300	mg/kg	M	7.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	372	mg/kg	372	mg/kg	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	988	mg/kg	988	mg/kg	M	5.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	1.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	59.4	mg/kg	59.4	mg/kg	M	3.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Notes:

EPC Selected for Risk Calculation: (M) Medium Specific.

Route EPC Value = Medium EPC Value.

NA = not available

-- = not analyzed

NC = not calculated

mg/kg = milligrams per kilogram

mg/kg-day = milligrams per kilogram - day

Total Child Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Table 8.1vv Child Resident RME Soil at Property 31016
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	1.2E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1240	mg/kg	1240	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	13300	mg/kg	13300	mg/kg	M	1.5E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	372	mg/kg	372	mg/kg	M	4.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	988	mg/kg	988	mg/kg	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	2.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	59.4	mg/kg	59.4	mg/kg	M	6.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	3.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1240	mg/kg	1240	mg/kg	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	3.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	13300	mg/kg	13300	mg/kg	M	4.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	372	mg/kg	372	mg/kg	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	988	mg/kg	988	mg/kg	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	8.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	59.4	mg/kg	59.4	mg/kg	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.1vv Child Resident CTE Soil at Property 31016
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Aluminum	10800	mg/kg	10800	mg/kg	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1240	mg/kg	1240	mg/kg	M	1.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	1.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	13300	mg/kg	13300	mg/kg	M	1.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	372	mg/kg	372	mg/kg	M	4.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	988	mg/kg	988	mg/kg	M	1.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	3.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	59.4	mg/kg	59.4	mg/kg	M	7.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
Dermal	Aluminum	10800	mg/kg	10800	mg/kg	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Antimony	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Arsenic	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	1.5E+00	$(mg/kg\text{-}day)^{-1}$	NC
	Barium	1240	mg/kg	1240	mg/kg	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	mg/kg	ND	mg/kg	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cobalt	10.5	mg/kg	10.5	mg/kg	M	1.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Iron	13300	mg/kg	13300	mg/kg	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	372	mg/kg	372	mg/kg	M	5.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Manganese	988	mg/kg	988	mg/kg	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Vanadium	26.2	mg/kg	26.2	mg/kg	M	3.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Zinc	59.4	mg/kg	59.4	mg/kg	M	8.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										0.0E+00
										Total Cancer Risk Across All Exposure Routes/Pathways	0.0E+00

Total Adult Cancer Risk Across All Exposure Routes/Pathways	NC
Total Adult and Child Cancer Risk Across All Exposure Routes/Pathways	NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific.
Route EPC Value = Medium EPC Value.
NA = not available
-- = not analyzed
NC = not calculated
mg/kg = milligrams per kilogram
mg/kg-day = milligrams per kilogram - day

Table 8.2a Adult Resident RME Groundwater at Property 8
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	78	µg/L	78	µg/L	M	7.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.2	µg/L	1.2	µg/L	M	1.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	78	µg/L	78	µg/L	M	3.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.2	µg/L	1.2	µg/L	M	5.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2a Adult Resident CTE Groundwater at Property 8
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	78	µg/L	78	µg/L	M	1.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.2	µg/L	1.2	µg/L	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	78	µg/L	78	µg/L	M	3.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.2	µg/L	1.2	µg/L	M	5.2E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2a Child Resident RME Groundwater at Property 8
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	78	µg/L	78	µg/L	M	4.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.2	µg/L	1.2	µg/L	M	7.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	78	µg/L	78	µg/L	M	2.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.2	µg/L	1.2	µg/L	M	4.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2a Child Resident CTE Groundwater at Property 8
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 8
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	78	µg/L	78	µg/L	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.2	µg/L	1.2	µg/L	M	6.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	78	µg/L	78	µg/L	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.2	µg/L	1.2	µg/L	M	3.3E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2b Adult Resident RME Groundwater at Property 69
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	827	µg/L	827	µg/L	M	7.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	µg/L	6	µg/L	M	5.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8.8	µg/L	8.8	µg/L	M	8.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	827	µg/L	827	µg/L	M	4.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	µg/L	6	µg/L	M	2.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8.8	µg/L	8.8	µg/L	M	4.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2b Adult Resident CTE Groundwater at Property 69
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	827	µg/L	827	µg/L	M	1.1E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	µg/L	6	µg/L	M	8.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8.8	µg/L	8.8	µg/L	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	827	µg/L	827	µg/L	M	3.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	µg/L	6	µg/L	M	2.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8.8	µg/L	8.8	µg/L	M	3.8E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2b Child Resident RME Groundwater at Property 69
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	827	µg/L	827	µg/L	M	5.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	µg/L	6	µg/L	M	3.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8.8	µg/L	8.8	µg/L	M	5.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	827	µg/L	827	µg/L	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	µg/L	6	µg/L	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8.8	µg/L	8.8	µg/L	M	3.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2b Child Resident CTE Groundwater at Property 69
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 69
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	827	µg/L	827	µg/L	M	4.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	µg/L	6	µg/L	M	3.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8.8	µg/L	8.8	µg/L	M	4.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	827	µg/L	827	µg/L	M	2.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	6	µg/L	6	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	8.8	µg/L	8.8	µg/L	M	2.5E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2c Adult Resident RME Groundwater at Property 438
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	80	µg/L	80	µg/L	M	7.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	80	µg/L	80	µg/L	M	3.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2c Adult Resident CTE Groundwater at Property 438
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	80	µg/L	80	µg/L	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	80	µg/L	80	µg/L	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2c Child Resident RME Groundwater at Property 438
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	80	µg/L	80	µg/L	M	4.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	80	µg/L	80	µg/L	M	2.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2c Child Resident CTE Groundwater at Property 438
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 438
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	80	µg/L	80	µg/L	M	4.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	80	µg/L	80	µg/L	M	2.2E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2d Adult Resident RME Groundwater at Property 1612
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	129	µg/L	129	µg/L	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	129	µg/L	129	µg/L	M	6.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2d Adult Resident CTE Groundwater at Property 1612
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	129	µg/L	129	µg/L	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	129	µg/L	129	µg/L	M	5.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2d Child Resident RME Groundwater at Property 1612
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	129	µg/L	129	µg/L	M	7.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	129	µg/L	129	µg/L	M	4.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2d Child Resident CTE Groundwater at Property 1612
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1612
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	129	µg/L	129	µg/L	M	6.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	129	µg/L	129	µg/L	M	3.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2e Adult Resident RME Groundwater at Property 1653
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1653
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	595	µg/L	595	µg/L	M	5.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	28	µg/L	28	µg/L	M	2.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	595	µg/L	595	µg/L	M	2.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	28	µg/L	28	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2e Adult Resident CTE Groundwater at Property 1653
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1653
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	595	µg/L	595	µg/L	M	8.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	28	µg/L	28	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	595	µg/L	595	µg/L	M	2.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	28	µg/L	28	µg/L	M	1.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2e Child Resident RME Groundwater at Property 1653
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1653
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	595	µg/L	595	µg/L	M	3.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	28	µg/L	28	µg/L	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	595	µg/L	595	µg/L	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	28	µg/L	28	µg/L	M	1.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2e Child Resident CTE Groundwater at Property 1653
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 1653
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	595	µg/L	595	µg/L	M	3.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	28	µg/L	28	µg/L	M	1.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	595	µg/L	595	µg/L	M	1.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	28	µg/L	28	µg/L	M	7.8E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2f Adult Resident RME Groundwater at Property 5007
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	126	µg/L	126	µg/L	M	1.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	2.2	µg/L	2.2	µg/L	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	126	µg/L	126	µg/L	M	6.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	2.2	µg/L	2.2	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2f Adult Resident CTE Groundwater at Property 5007
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	126	µg/L	126	µg/L	M	1.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	4.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	2.2	µg/L	2.2	µg/L	M	3.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	126	µg/L	126	µg/L	M	5.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	2.2	µg/L	2.2	µg/L	M	9.5E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2f Child Resident RME Groundwater at Property 5007
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	126	µg/L	126	µg/L	M	7.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	2.2	µg/L	2.2	µg/L	M	1.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	126	µg/L	126	µg/L	M	4.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	2.2	µg/L	2.2	µg/L	M	8.0E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2f Child Resident CTE Groundwater at Property 5007
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5007
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	126	µg/L	126	µg/L	M	6.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	2.2	µg/L	2.2	µg/L	M	1.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	126	µg/L	126	µg/L	M	3.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	8.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	2.2	µg/L	2.2	µg/L	M	6.1E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2g Adult Resident RME Groundwater at Property 5008
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	494	µg/L	494	µg/L	M	4.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3.1	µg/L	3.1	µg/L	M	2.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	494	µg/L	494	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3.1	µg/L	3.1	µg/L	M	1.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2g Adult Resident CTE Groundwater at Property 5008
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	494	µg/L	494	µg/L	M	6.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3.1	µg/L	3.1	µg/L	M	4.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	494	µg/L	494	µg/L	M	2.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3.1	µg/L	3.1	µg/L	M	1.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2g Child Resident RME Groundwater at Property 5008
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	494	µg/L	494	µg/L	M	3.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3.1	µg/L	3.1	µg/L	M	1.9E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	494	µg/L	494	µg/L	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3.1	µg/L	3.1	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2g Child Resident CTE Groundwater at Property 5008
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	494	µg/L	494	µg/L	M	2.5E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3.1	µg/L	3.1	µg/L	M	1.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	494	µg/L	494	µg/L	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	3.1	µg/L	3.1	µg/L	M	8.6E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2h Adult Resident RME Groundwater at Property 5014
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	170	µg/L	170	µg/L	M	1.6E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	170	µg/L	170	µg/L	M	8.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2h Adult Resident CTE Groundwater at Property 5014
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	170	µg/L	170	µg/L	M	2.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	170	µg/L	170	µg/L	M	7.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2h Child Resident RME Groundwater at Property 5014
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	170	µg/L	170	µg/L	M	1.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	170	µg/L	170	µg/L	M	6.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2h Child Resident CTE Groundwater at Property 5014
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 5014
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	170	µg/L	170	µg/L	M	8.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	170	µg/L	170	µg/L	M	4.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2i Adult Resident RME Groundwater at Property 20008
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	500	µg/L	500	µg/L	M	4.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	14.9	µg/L	14.9	µg/L	M	1.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	500	µg/L	500	µg/L	M	2.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	14.9	µg/L	14.9	µg/L	M	7.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2i Adult Resident CTE Groundwater at Property 20008
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	500	µg/L	500	µg/L	M	6.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	14.9	µg/L	14.9	µg/L	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	500	µg/L	500	µg/L	M	2.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	14.9	µg/L	14.9	µg/L	M	6.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2i Child Resident RME Groundwater at Property 20008
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	500	µg/L	500	µg/L	M	3.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	14.9	µg/L	14.9	µg/L	M	9.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	500	µg/L	500	µg/L	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	14.9	µg/L	14.9	µg/L	M	5.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2i Child Resident CTE Groundwater at Property 20008
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20008
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	500	µg/L	500	µg/L	M	2.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	14.9	µg/L	14.9	µg/L	M	7.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	500	µg/L	500	µg/L	M	1.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	14.9	µg/L	14.9	µg/L	M	4.1E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2j Adult Resident RME Groundwater at Property 20027
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	554	µg/L	554	µg/L	M	5.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	554	µg/L	554	µg/L	M	2.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2j Adult Resident CTE Groundwater at Property 20027
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	554	µg/L	554	µg/L	M	7.4E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	554	µg/L	554	µg/L	M	2.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2j Child Resident RME Groundwater at Property 20027
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	554	µg/L	554	µg/L	M	3.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	554	µg/L	554	µg/L	M	2.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2j Child Resident CTE Groundwater at Property 20027
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20027
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	554	µg/L	554	µg/L	M	2.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	554	µg/L	554	µg/L	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2k Adult Resident RME Groundwater at Property 20437
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	641	µg/L	641	µg/L	M	6.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	µg/L	5	µg/L	M	4.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.8	µg/L	6.8	µg/L	M	6.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	641	µg/L	641	µg/L	M	3.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	µg/L	5	µg/L	M	2.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.8	µg/L	6.8	µg/L	M	3.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2k Adult Resident CTE Groundwater at Property 20437
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	641	µg/L	641	µg/L	M	8.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	µg/L	5	µg/L	M	6.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.8	µg/L	6.8	µg/L	M	9.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	641	µg/L	641	µg/L	M	2.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	µg/L	5	µg/L	M	2.2E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.8	µg/L	6.8	µg/L	M	2.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2k Child Resident RME Groundwater at Property 20437
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	641	µg/L	641	µg/L	M	3.9E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	µg/L	5	µg/L	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.8	µg/L	6.8	µg/L	M	4.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	641	µg/L	641	µg/L	M	2.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	µg/L	5	µg/L	M	1.8E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.8	µg/L	6.8	µg/L	M	2.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2k Child Resident CTE Groundwater at Property 20437
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20437
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	641	µg/L	641	µg/L	M	3.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	µg/L	5	µg/L	M	2.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.8	µg/L	6.8	µg/L	M	3.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	641	µg/L	641	µg/L	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	5	µg/L	5	µg/L	M	1.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.8	µg/L	6.8	µg/L	M	1.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2l Adult Resident RME Groundwater at Property 20767
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	607	µg/L	607	µg/L	M	5.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	607	µg/L	607	µg/L	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2l Adult Resident CTE Groundwater at Property 20767
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	607	µg/L	607	µg/L	M	8.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	607	µg/L	607	µg/L	M	2.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2l Child Resident RME Groundwater at Property 20767
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	607	µg/L	607	µg/L	M	3.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	607	µg/L	607	µg/L	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2l Child Resident CTE Groundwater at Property 20767
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 20767
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	607	µg/L	607	µg/L	M	3.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	607	µg/L	607	µg/L	M	1.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2m Adult Resident RME Groundwater at Property 23264
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	85	µg/L	85	µg/L	M	8.0E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	5.7	µg/L	5.7	µg/L	M	5.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	85	µg/L	85	µg/L	M	4.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	5.7	µg/L	5.7	µg/L	M	2.8E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2m Adult Resident CTE Groundwater at Property 23264
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	85	µg/L	85	µg/L	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	4.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	5.7	µg/L	5.7	µg/L	M	7.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	85	µg/L	85	µg/L	M	3.7E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	5.7	µg/L	5.7	µg/L	M	2.5E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2m Child Resident RME Groundwater at Property 23264
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	85	µg/L	85	µg/L	M	5.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	5.7	µg/L	5.7	µg/L	M	3.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	85	µg/L	85	µg/L	M	3.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	5.7	µg/L	5.7	µg/L	M	2.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2m Child Resident CTE Groundwater at Property 23264
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23264
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	85	µg/L	85	µg/L	M	4.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	5.7	µg/L	5.7	µg/L	M	2.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	85	µg/L	85	µg/L	M	2.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	8.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	5.7	µg/L	5.7	µg/L	M	1.6E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2n Adult Resident RME Groundwater at Property 23378
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	84	µg/L	84	µg/L	M	7.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	84	µg/L	84	µg/L	M	4.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2n Adult Resident CTE Groundwater at Property 23378
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	84	µg/L	84	µg/L	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	4.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	84	µg/L	84	µg/L	M	3.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2n Child Resident RME Groundwater at Property 23378
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	84	µg/L	84	µg/L	M	5.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	84	µg/L	84	µg/L	M	3.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2n Child Resident CTE Groundwater at Property 23378
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23378
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	84	µg/L	84	µg/L	M	4.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	84	µg/L	84	µg/L	M	2.3E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	8.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2o Adult Resident RME Groundwater at Property 23575
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	235	µg/L	235	µg/L	M	2.2E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12	µg/L	12	µg/L	M	1.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	235	µg/L	235	µg/L	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12	µg/L	12	µg/L	M	5.9E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2o Adult Resident CTE Groundwater at Property 23575
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	235	µg/L	235	µg/L	M	3.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12	µg/L	12	µg/L	M	1.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	235	µg/L	235	µg/L	M	1.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12	µg/L	12	µg/L	M	5.2E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2o Child Resident RME Groundwater at Property 23575
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	235	µg/L	235	µg/L	M	1.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12	µg/L	12	µg/L	M	7.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	235	µg/L	235	µg/L	M	8.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12	µg/L	12	µg/L	M	4.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2o Child Resident CTE Groundwater at Property 23575
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 23575
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	235	µg/L	235	µg/L	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12	µg/L	12	µg/L	M	6.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	235	µg/L	235	µg/L	M	6.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12	µg/L	12	µg/L	M	3.3E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2p Adult Resident RME Groundwater at Property 30079
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	1230	µg/L	1230	µg/L	M	1.2E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	2.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.3	µg/L	1.3	µg/L	M	1.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	1230	µg/L	1230	µg/L	M	6.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.3	µg/L	1.3	µg/L	M	6.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2p Adult Resident CTE Groundwater at Property 30079
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	1230	µg/L	1230	µg/L	M	1.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	4.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.3	µg/L	1.3	µg/L	M	1.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	1230	µg/L	1230	µg/L	M	5.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.3	µg/L	1.3	µg/L	M	5.6E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2p Child Resident RME Groundwater at Property 30079
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	1230	µg/L	1230	µg/L	M	7.4E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.3	µg/L	1.3	µg/L	M	7.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	1230	µg/L	1230	µg/L	M	4.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.3	µg/L	1.3	µg/L	M	4.7E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2p Child Resident CTE Groundwater at Property 30079
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30079
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	1230	µg/L	1230	µg/L	M	6.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	1.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.3	µg/L	1.3	µg/L	M	6.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	1230	µg/L	1230	µg/L	M	3.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	3	µg/L	3	µg/L	M	8.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	1.3	µg/L	1.3	µg/L	M	3.6E-10	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2q Adult Resident RME Groundwater at Property 30182
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	962	µg/L	962	µg/L	M	9.0E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.7	µg/L	6.7	µg/L	M	6.3E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	962	µg/L	962	µg/L	M	4.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.7	µg/L	6.7	µg/L	M	3.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2q Adult Resident CTE Groundwater at Property 30182
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	962	µg/L	962	µg/L	M	1.3E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.7	µg/L	6.7	µg/L	M	9.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	962	µg/L	962	µg/L	M	4.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.7	µg/L	6.7	µg/L	M	2.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2q Child Resident RME Groundwater at Property 30182
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	962	µg/L	962	µg/L	M	5.8E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.7	µg/L	6.7	µg/L	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	962	µg/L	962	µg/L	M	3.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.7	µg/L	6.7	µg/L	M	2.4E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2q Child Resident CTE Groundwater at Property 30182
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30182
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	962	µg/L	962	µg/L	M	4.9E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.7	µg/L	6.7	µg/L	M	3.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	962	µg/L	962	µg/L	M	2.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	6.7	µg/L	6.7	µg/L	M	1.9E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2r Adult Resident RME Groundwater at Property 30448
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	94	µg/L	94	µg/L	M	8.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	19.5	µg/L	19.5	µg/L	M	1.8E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	94	µg/L	94	µg/L	M	4.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	19.5	µg/L	19.5	µg/L	M	9.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2r Adult Resident CTE Groundwater at Property 30448
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	94	µg/L	94	µg/L	M	1.3E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	19.5	µg/L	19.5	µg/L	M	2.6E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	94	µg/L	94	µg/L	M	4.1E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	19.5	µg/L	19.5	µg/L	M	8.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2r Child Resident RME Groundwater at Property 30448
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	94	µg/L	94	µg/L	M	5.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	19.5	µg/L	19.5	µg/L	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	94	µg/L	94	µg/L	M	3.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	19.5	µg/L	19.5	µg/L	M	7.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2r Child Resident CTE Groundwater at Property 30448
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30448
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	94	µg/L	94	µg/L	M	4.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	19.5	µg/L	19.5	µg/L	M	1.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	94	µg/L	94	µg/L	M	2.6E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	19.5	µg/L	19.5	µg/L	M	5.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2s Adult Resident RME Groundwater at Property 30553
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	1110	µg/L	1110	µg/L	M	1.0E-02	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	1110	µg/L	1110	µg/L	M	5.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2s Adult Resident CTE Groundwater at Property 30553
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	1110	µg/L	1110	µg/L	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	1110	µg/L	1110	µg/L	M	4.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2s Child Resident RME Groundwater at Property 30553
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	1110	µg/L	1110	µg/L	M	6.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	1110	µg/L	1110	µg/L	M	4.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2s Child Resident CTE Groundwater at Property 30553
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30553
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	1110	µg/L	1110	µg/L	M	5.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	1110	µg/L	1110	µg/L	M	3.1E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2t Adult Resident RME Groundwater at Property 30914
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	161	µg/L	161	µg/L	M	1.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.4	µg/L	12.4	µg/L	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	161	µg/L	161	µg/L	M	7.9E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.4	µg/L	12.4	µg/L	M	6.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2t Adult Resident CTE Groundwater at Property 30914
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	161	µg/L	161	µg/L	M	2.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.4	µg/L	12.4	µg/L	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	161	µg/L	161	µg/L	M	6.9E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.4	µg/L	12.4	µg/L	M	5.4E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2t Child Resident RME Groundwater at Property 30914
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	161	µg/L	161	µg/L	M	9.7E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.4	µg/L	12.4	µg/L	M	7.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	161	µg/L	161	µg/L	M	5.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.4	µg/L	12.4	µg/L	M	4.5E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2t Child Resident CTE Groundwater at Property 30914
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30914
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	161	µg/L	161	µg/L	M	8.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.4	µg/L	12.4	µg/L	M	6.3E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	161	µg/L	161	µg/L	M	4.5E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.4	µg/L	12.4	µg/L	M	3.5E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2u Adult Resident RME Groundwater at Property 30965
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	419	µg/L	419	µg/L	M	3.9E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	419	µg/L	419	µg/L	M	2.1E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2u Adult Resident CTE Groundwater at Property 30965
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	419	µg/L	419	µg/L	M	5.6E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	419	µg/L	419	µg/L	M	1.8E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2u Child Resident RME Groundwater at Property 30965
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	419	µg/L	419	µg/L	M	2.5E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	419	µg/L	419	µg/L	M	1.5E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2u Child Resident CTE Groundwater at Property 30965
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 30965
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	419	µg/L	419	µg/L	M	2.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	419	µg/L	419	µg/L	M	1.2E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	ND	µg/L	ND	µg/L	M	NC	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Table 8.2v Adult Resident RME Groundwater at Property 31016
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	608	µg/L	608	µg/L	M	5.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	3.8E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.8	µg/L	12.8	µg/L	M	1.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	608	µg/L	608	µg/L	M	3.0E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.8	µg/L	12.8	µg/L	M	6.3E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2v Adult Resident CTE Groundwater at Property 31016
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	608	µg/L	608	µg/L	M	8.2E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	5.4E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.8	µg/L	12.8	µg/L	M	1.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	608	µg/L	608	µg/L	M	2.6E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.7E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.8	µg/L	12.8	µg/L	M	5.5E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2v Child Resident RME Groundwater at Property 31016
Calculation of Cancer Risks, Reasonable Maximum Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	608	µg/L	608	µg/L	M	3.7E-03	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.4E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.8	µg/L	12.8	µg/L	M	7.7E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	608	µg/L	608	µg/L	M	2.2E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.4E-07	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.8	µg/L	12.8	µg/L	M	4.6E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated
mg/kg-day = milligrams per kilogram - day
µg/L = micrograms per liter

Table 8.2v Child Resident CTE Groundwater at Property 31016
Calculation of Cancer Risks, Central Tendency Exposure
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Property 31016
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Chemical of Potential Concern	Medium EPC Value	Medium EPC Units	Route EPC Value	Route EPC Units	EPC Selected for Risk Calculation	Intake (Cancer)	Intake (Cancer) Units	Cancer Slope Factor	Cancer Slope Factor Units	Cancer Risk
Ingestion	Barium	608	µg/L	608	µg/L	M	3.1E-04	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	2.0E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.8	µg/L	12.8	µg/L	M	6.5E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
Dermal	Barium	608	µg/L	608	µg/L	M	1.7E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Cadmium	4	µg/L	4	µg/L	M	1.1E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	Lead	12.8	µg/L	12.8	µg/L	M	3.6E-09	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NC
	(Total)										NC
											NC

Notes:
EPC Selected for Risk Calculation: (M) Medium Specific, (R) Route Specific.
Ingestion Route EPC Value = Medium EPC Value.
NA = not available
NC = not calculated

mg/kg-day = milligrams per kilogram - day

µg/L = micrograms per liter

Appendix H

RAGS D TABLE 9s AND TABLE 10s

Table 9.1a Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 8
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 8	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 8	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	8E-04	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	3E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	3E-01

NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1a Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 8
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 8	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 8	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-03	NA	2E-04	5E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	7E-03	1E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	1E-01
Total Hazard Index Across All Media and All Exposure Routes	1E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1a Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 8
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 8	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 8	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	2E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		6E-01	NC	7E-02	7E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	7E-01
Total Hazard Index Across All Media and All Exposure Routes	7E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	7E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1a Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 8
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 8	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 8	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-03	NA	5E-04	8E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	NC	2E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1b Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 69
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 69	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 69	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-01	NA	8E-03	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-01	NA	3E-02	4E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		4E-01	NC	4E-02	5E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	5E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	5E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	5E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1b Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 69
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 69	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 69	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-02	NA	3E-03	6E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	1E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	1E-02	2E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	2E-01
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1b Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 69
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 69	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 69	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-01	NA	2E-02	3E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-01	NA	1E-01	9E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E+00	NC	1E-01	1E+00

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	1E+00
Total Hazard Index Across All Media and All Exposure Routes	1E+00
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1b Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 69
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 69	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 69	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-02	NA	6E-03	8E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		3E-01	NC	3E-02	3E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	3E-01
Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1c Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 438
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 438	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	6E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	7.0E-06	NA	8.4E-07	7.9E-06	Arsenic	Skin/Vascular	5E-02	NA	5E-03	5E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	1E-02	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	3E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-02	NA	2E-03	6E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-03	NA	7E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-03	NA	2E-04	5E-03
			(Total)	7.0E-06	NC	8.4E-07	7.9E-06	(Total)		2E-01	NC	4E-02	2E-01
Groundwater	Groundwater	Property 438	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	8E-04	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	3E-01

Total Risk Across Soil	7.9E-06	Total Hazard Index Across Soil	2E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-01
Total Risk Across All Media and All Exposure Routes	7.9E-06	Total Hazard Index Across All Media and All Exposure Routes	5E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.8E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	2.6E-05

Total CNS HI =	3E-02
Total Lifetime HI =	1E-02
Total Blood HI =	5E-03
Total Skin/Vascular HI =	5E-02
Total Kidney HI =	3E-01
Total Thyroid HI =	6E-02
Total Gastrointestinal Tract HI =	3E-02

Table 9.1c Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 438
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 438	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-03	NA	6E-05	5E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	7.2E-07	NA	2.5E-08	7.4E-07	Arsenic	Skin/Vascular	2E-02	NA	5E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-03	NA	1E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-03	NA	3E-04	6E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-03	NA	1E-03	4E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	7E-04	2E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	2E-05	2E-03
			(Total)	7.2E-07	NC	2.5E-08	7.4E-07	(Total)		7E-02	NC	4E-03	8E-02
Groundwater	Groundwater	Property 438	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-03	NA	2E-04	6E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	7E-03	1E-01

Total Risk Across Soil	7.4E-07	Total Hazard Index Across Soil	8E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E-01
Total Risk Across All Media and All Exposure Routes	7.4E-07	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.0E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.7E-06

Total CNS HI =	1E-02
Total Lifetime HI =	2E-03
Total Blood HI =	2E-03
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	1E-01
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1c Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 438
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 438	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	4E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.6E-05	NA	1.4E-06	1.8E-05	Arsenic	Skin/Vascular	4E-01	NA	4E-02	5E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	9E-02	3E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-01	NA	1E-02	5E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	7E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	9E-02	NA	6E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-02	NA	5E-02	9E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-02	NA	1E-03	5E-02
			(Total)	1.6E-05	NC	1.4E-06	1.8E-05	(Total)		2E+00	NC	3E-01	2E+00
Groundwater	Groundwater	Property 438	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	2E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		6E-01	NC	7E-02	7E-01

Total Risk Across Soil	1.8E-05
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	1.8E-05
Total Adult Risk Across All Media and All Exposure Routes	7.9E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.6E-05

Total Hazard Index Across Soil	2E+00
Total Hazard Index Across Groundwater	7E-01
Total Hazard Index Across All Media and All Exposure Routes	3E+00
Total CNS HI =	3E-01
Total Lifetime HI =	9E-02
Total Blood HI =	5E-02
Total Skin/Vascular HI =	5E-01
Total Kidney HI =	1E+00
Total Thyroid HI =	5E-01
Total Gastrointestinal Tract HI =	3E-01

Notes:
NA = not available
NC = not calculated

Table 9.1c Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 438
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 438	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	5E-04	5E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.9E-06	NA	6.4E-08	2.0E-06	Arsenic	Skin/Vascular	1E-01	NA	5E-03	2E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-02	NA	1E-02	9E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	5E-02	NA	2E-03	6E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	9E-02	NA	1E-03	9E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-02	NA	9E-03	4E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	7E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-02	NA	2E-04	2E-02
			(Total)	1.9E-06	NC	6.4E-08	2.0E-06	(Total)		7E-01	NC	4E-02	7E-01
Groundwater	Groundwater	Property 438	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-03	NA	6E-04	8E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	2.0E-06	Total Hazard Index Across Soil	7E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	2.0E-06	Total Hazard Index Across All Media and All Exposure Routes	9E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	7.4E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	2.7E-06

Total CNS HI =	9E-02
Total Lifetime HI =	2E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	2E-01
Total Kidney HI =	3E-01
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	9E-02

Table 9.1d Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 486
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 486	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-02	NA	1E-03	3E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	6E-02	NA	2E-02	7E-02
			Arsenic	5.8E-06	NA	7.0E-07	6.5E-06	Arsenic	Skin/Vascular	4E-02	NA	5E-03	4E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-03	NA	3E-03	9E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	4E-04	3E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-02	NA	1E-03	3E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-02	NA	2E-03	4E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-03	NA	7E-03	1E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	8E-03	NA	1E-02	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-04	NA	7E-06	2E-04
			(Total)	5.8E-06	NC	7.0E-07	6.5E-06	(Total)		2E-01	NC	5E-02	3E-01
Groundwater	Groundwater	Property 486	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	6.5E-06	Total Hazard Index Across Soil	3E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	6.5E-06	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.5E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	2.1E-05

Total CNS HI =	4E-02
Total Lifetime HI =	9E-02
Total Blood HI =	7E-02
Total Skin/Vascular HI =	4E-02
Total Kidney HI =	1E-02
Total Thyroid HI =	3E-02
Total Gastrointestinal Tract HI =	4E-02

Table 9.1d Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 486
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 486	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	1E-04	1E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-02	NA	5E-03	3E-02
			Arsenic	6.0E-07	NA	2.0E-08	6.2E-07	Arsenic	Skin/Vascular	1E-02	NA	5E-04	1E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-03	NA	3E-04	2E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-04	NA	4E-05	9E-04
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	9E-03	NA	1E-04	9E-03
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-02	NA	2E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-03	NA	7E-04	3E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-03	NA	1E-03	4E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-04	NA	5E-06	5E-04
			(Total)	6.0E-07	NC	2.0E-08	6.2E-07	(Total)		8E-02	NC	8E-03	8E-02
Groundwater	Groundwater	Property 486	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	6.2E-07
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	6.2E-07
Total Hazard Index Across Soil	8E-02
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	8E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.6E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.3E-06

Total CNS HI =	1E-02
Total Lifetime HI =	3E-02
Total Blood HI =	3E-02
Total Skin/Vascular HI =	1E-02
Total Kidney HI =	3E-03
Total Thyroid HI =	9E-03
Total Gastrointestinal Tract HI =	2E-02

Table 9.1d Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 486
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 486	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-01	NA	8E-03	3E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	5E-01	NA	3E-01	9E-01
			Arsenic	1.4E-05	NA	1.1E-06	1.5E-05	Arsenic	Skin/Vascular	4E-01	NA	3E-02	4E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-02	NA	2E-02	8E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	2E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	7E-03	3E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-01	NA	1E-02	4E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-02	NA	5E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	7E-02	NA	8E-02	2E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-02	NA	4E-04	1E-02
			(Total)	1.4E-05	NC	1.1E-06	1.5E-05	(Total)		2E+00	NC	5E-01	3E+00
Groundwater	Groundwater	Property 486	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.5E-05	Total Hazard Index Across Soil	3E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.5E-05	Total Hazard Index Across All Media and All Exposure Routes	3E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	6.5E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.1E-05

Total CNS HI =	4E-01
Total Lifetime HI =	1E+00
Total Blood HI =	9E-01
Total Skin/Vascular HI =	4E-01
Total Kidney HI =	1E-01
Total Thyroid HI =	3E-01
Total Gastrointestinal Tract HI =	4E-01

Table 9.1d Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 486
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 486	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	1E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-01	NA	4E-02	2E-01
			Arsenic	1.6E-06	NA	5.3E-08	1.6E-06	Arsenic	Skin/Vascular	1E-01	NA	4E-03	1E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	3E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-03	NA	3E-04	8E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	9E-02	NA	1E-03	9E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	2E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	6E-03	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-02	NA	1E-02	4E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-03	NA	5E-05	5E-03
			(Total)	1.6E-06	NC	5.3E-08	1.6E-06	(Total)		7E-01	NC	7E-02	8E-01
Groundwater	Groundwater	Property 486	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.6E-06	Total Hazard Index Across Soil	8E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.6E-06	Total Hazard Index Across All Media and All Exposure Routes	8E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	6.2E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	2.3E-06

Total CNS HI =	1E-01
Total Lifetime HI =	3E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	1E-01
Total Kidney HI =	3E-02
Total Thyroid HI =	9E-02
Total Gastrointestinal Tract HI =	1E-01

Table 9.1e Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 1612
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1612	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	6E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	5.8E-07	NA	5.8E-07	1.2E-06	Arsenic	Skin/Vascular	4E-02	NA	4E-03	4E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	6E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	6E-02	NA	2E-03	6E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-03	NA	9E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	8E-05	2E-03
			(Total)	5.8E-07	NC	5.8E-07	1.2E-06	(Total)		2E-01	NC	4E-02	2E-01
Groundwater	Groundwater	Property 1612	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	1E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	3E-01

Total Risk Across Soil	1.2E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	1.2E-06
Total Hazard Index Across Soil	2E-01
Total Hazard Index Across Groundwater	3E-01
Total Hazard Index Across All Media and All Exposure Routes	5E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.6E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	2.7E-05

Total CNS HI =	4E-02
Total Lifetime HI =	1E-02
Total Blood HI =	2E-03
Total Skin/Vascular HI =	4E-02
Total Kidney HI =	3E-01
Total Thyroid HI =	6E-02
Total Gastrointestinal Tract HI =	3E-02

Table 9.1e Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 1612
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1612	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-03	NA	6E-05	5E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	5.8E-07	NA	2.0E-08	6.0E-07	Arsenic	Skin/Vascular	1E-02	NA	4E-04	1E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-03	NA	6E-04	4E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-03	NA	1E-03	6E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	9E-04	3E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	7E-04	NA	8E-06	7E-04
			(Total)	5.8E-07	NC	2.0E-08	6.0E-07	(Total)		6E-02	NC	4E-03	7E-02
Groundwater	Groundwater	Property 1612	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	9E-03	NA	4E-04	9E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	7E-03	1E-01

Total Risk Across Soil	6.0E-07	Total Hazard Index Across Soil	7E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E-01
Total Risk Across All Media and All Exposure Routes	6.0E-07	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.6E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.2E-06

Total CNS HI =	1E-02
Total Lifetime HI =	3E-03
Total Blood HI =	7E-04
Total Skin/Vascular HI =	1E-02
Total Kidney HI =	1E-01
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1e Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 1612
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1612	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.3E-05	NA	1.3E-05	2.6E-05	Arsenic	Skin/Vascular	1E-05	NA	1E-06	1E-05
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	1.3E-05	NC	1.3E-05	2.6E-05	(Total)		1E-05	NC	1E-06	1E-05
Groundwater	Groundwater	Property 1612	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-02	NA	4E-03	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		6E-01	NC	7E-02	7E-01

Total Risk Across Soil	2.6E-05	Total Hazard Index Across Soil	1E-05
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	7E-01
Total Risk Across All Media and All Exposure Routes	2.6E-05	Total Hazard Index Across All Media and All Exposure Routes	7E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	1.2E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.7E-05

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	1E-05
Total Kidney HI =	7E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1e Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 1612
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1612	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	6E-04	5E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.5E-06	NA	5.2E-08	1.6E-06	Arsenic	Skin/Vascular	1E-01	NA	4E-03	1E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	5E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-02	NA	1E-02	6E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	8E-03	3E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	7E-03	NA	8E-05	7E-03
			(Total)	1.5E-06	NC	5.2E-08	1.6E-06	(Total)		6E-01	NC	3E-02	6E-01
Groundwater	Groundwater	Property 1612	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	9E-04	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	1.6E-06	Total Hazard Index Across Soil	6E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	1.6E-06	Total Hazard Index Across All Media and All Exposure Routes	8E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	6.0E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	2.2E-06

Total CNS HI =	1E-01
Total Lifetime HI =	3E-02
Total Blood HI =	7E-03
Total Skin/Vascular HI =	1E-01
Total Kidney HI =	2E-01
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1f Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 1643
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1643	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 1643	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1f Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 1643
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1643	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 1643	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1f Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 1643
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1643	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 1643	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1f Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 1643
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1643	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 1643	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1g Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 1653
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1653	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 1653	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-02	NA	6E-03	9E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		3E-01	NC	3E-02	3E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1g Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 1653
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1653	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 1653	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	2E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	9E-03	2E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1g Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 1653
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1653	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 1653	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	2E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		8E-01	NC	9E-02	9E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	9E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	9E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	9E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1g Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 1653
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1653	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 1653	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-02	NA	4E-03	6E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	2E-01
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1h Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 5003
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5003	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	5E-04	1E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	4E-03	2E-02
			Arsenic	5.3E-06	NA	6.3E-07	5.9E-06	Arsenic	Skin/Vascular	3E-02	NA	4E-03	4E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-03	NA	2E-03	7E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-03	NA	6E-04	5E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	4E-02	NA	2E-03	4E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-03	NA	8E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-03	NA	2E-04	4E-03
			(Total)	5.3E-06	NC	6.3E-07	5.9E-06	(Total)		2E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 5003	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	5.9E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	5.9E-06

Total Hazard Index Across Soil	2E-01
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.3E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	1.9E-05

Total CNS HI =	4E-02
Total Lifetime HI =	3E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	4E-02
Total Kidney HI =	1E-02
Total Thyroid HI =	4E-02
Total Gastrointestinal Tract HI =	3E-02

Table 9.1h Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 5003
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5003	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	4E-03	NA	5E-05	4E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	5E-03	NA	4E-04	5E-03
			Arsenic	5.4E-07	NA	1.8E-08	5.6E-07	Arsenic	Skin/Vascular	1E-02	NA	4E-04	1E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-03	NA	2E-04	2E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-03	NA	6E-05	1E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-02	NA	2E-04	1E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-03	NA	1E-03	5E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	8E-04	2E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-03	NA	2E-05	1E-03
			(Total)	5.4E-07	NC	1.8E-08	5.6E-07	(Total)		6E-02	NC	3E-03	6E-02
Groundwater	Groundwater	Property 5003	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	5.6E-07	Total Hazard Index Across Soil	6E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	5.6E-07	Total Hazard Index Across All Media and All Exposure Routes	6E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.5E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.0E-06

Total CNS HI =	1E-02
Total Lifetime HI =	8E-03
Total Blood HI =	7E-03
Total Skin/Vascular HI =	1E-02
Total Kidney HI =	3E-03
Total Thyroid HI =	1E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1h Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 5003
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5003	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	3E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	2E-02	2E-01
			Arsenic	1.2E-05	NA	1.0E-06	1.3E-05	Arsenic	Skin/Vascular	3E-01	NA	3E-02	3E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	2E-02	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-02	NA	4E-03	4E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	4E-01	NA	1E-02	4E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	8E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	8E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-02	NA	5E-02	1E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-02	NA	1E-03	4E-02
			(Total)	1.2E-05	NC	1.0E-06	1.3E-05	(Total)		2E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 5003	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.3E-05	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.3E-05	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	5.9E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.9E-05

Total CNS HI =	3E-01
Total Lifetime HI =	2E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	3E-01
Total Kidney HI =	1E-01
Total Thyroid HI =	4E-01
Total Gastrointestinal Tract HI =	3E-01

Table 9.1h Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 5003
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5003	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	4E-02	NA	4E-04	4E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-02	NA	3E-03	5E-02
			Arsenic	1.4E-06	NA	4.8E-08	1.5E-06	Arsenic	Skin/Vascular	1E-01	NA	4E-03	1E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-02	NA	6E-04	1E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-01	NA	2E-03	1E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-02	NA	1E-02	5E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	7E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-02	NA	2E-04	1E-02
			(Total)	1.4E-06	NC	4.8E-08	1.5E-06	(Total)		5E-01	NC	3E-02	6E-01
Groundwater	Groundwater	Property 5003	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.5E-06	Total Hazard Index Across Soil	6E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.5E-06	Total Hazard Index Across All Media and All Exposure Routes	6E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	5.6E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	2.0E-06

Total CNS HI =	9E-02
Total Lifetime HI =	7E-02
Total Blood HI =	6E-02
Total Skin/Vascular HI =	1E-01
Total Kidney HI =	3E-02
Total Thyroid HI =	1E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1i Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 5007
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5007	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	8E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-02	NA	1E-02	5E-02
			Arsenic	7.8E-06	NA	9.4E-07	8.8E-06	Arsenic	Skin/Vascular	5E-02	NA	6E-03	6E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-03	NA	2E-03	5E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-02	NA	2E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	6E-02	NA	2E-03	6E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-02	NA	2E-03	4E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	8E-03	NA	1E-02	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-02	NA	2E-03	4E-02
			(Total)	7.8E-06	NC	9.4E-07	8.8E-06	(Total)		3E-01	NC	5E-02	3E-01
Groundwater	Groundwater	Property 5007	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	1E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	8.8E-06	Total Hazard Index Across Soil	3E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	8.8E-06	Total Hazard Index Across All Media and All Exposure Routes	5E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.0E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	2.9E-05

Total CNS HI =	4E-02
Total Lifetime HI =	7E-02
Total Blood HI =	9E-02
Total Skin/Vascular HI =	6E-02
Total Kidney HI =	2E-01
Total Thyroid HI =	6E-02
Total Gastrointestinal Tract HI =	4E-02

Table 9.1i Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 5007
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5007	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	7E-03	NA	8E-05	7E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	1E-03	1E-02
			Arsenic	8.0E-07	NA	2.7E-08	8.3E-07	Arsenic	Skin/Vascular	2E-02	NA	6E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-03	NA	2E-04	1E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	5E-03	NA	2E-04	5E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	2E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-03	NA	1E-03	5E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-03	NA	1E-03	4E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-02	NA	2E-04	1E-02
			(Total)	8.0E-07	NC	2.7E-08	8.3E-07	(Total)		1E-01	NC	5E-03	1E-01
Groundwater	Groundwater	Property 5007	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-03	NA	4E-04	9E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-02	NA	5E-03	9E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		9E-02	NC	6E-03	9E-02

Total Risk Across Soil	8.3E-07	Total Hazard Index Across Soil	1E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	9E-02
Total Risk Across All Media and All Exposure Routes	8.3E-07	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.2E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	3.0E-06

Total CNS HI =	1E-02
Total Lifetime HI =	2E-02
Total Blood HI =	3E-02
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	1E-01
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1i Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 5007
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5007	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	5E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-01	NA	7E-02	4E-01
			Arsenic	1.8E-05	NA	1.5E-06	2.0E-05	Arsenic	Skin/Vascular	5E-01	NA	4E-02	5E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	1E-02	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	1E-02	1E-01
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-01	NA	1E-02	5E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-01	NA	1E-02	4E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	7E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	7E-02	NA	8E-02	2E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-01	NA	1E-02	4E-01
			(Total)	1.8E-05	NC	1.5E-06	2.0E-05	(Total)		3E+00	NC	3E-01	3E+00
Groundwater	Groundwater	Property 5007	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	4E-03	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-01	NA	5E-02	5E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-01	NC	5E-02	5E-01

Total Risk Across Soil	2.0E-05	Total Hazard Index Across Soil	3E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	5E-01
Total Risk Across All Media and All Exposure Routes	2.0E-05	Total Hazard Index Across All Media and All Exposure Routes	3E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	8.8E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.9E-05

Total CNS HI =	4E-01
Total Lifetime HI =	6E-01
Total Blood HI =	8E-01
Total Skin/Vascular HI =	5E-01
Total Kidney HI =	7E-01
Total Thyroid HI =	5E-01
Total Gastrointestinal Tract HI =	4E-01

Table 9.1i Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 5007
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5007	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-02	NA	7E-04	6E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	9E-03	1E-01
			Arsenic	2.1E-06	NA	7.2E-08	2.2E-06	Arsenic	Skin/Vascular	2E-01	NA	6E-03	2E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	5E-02	NA	2E-03	5E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-02	NA	1E-02	4E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-02	NA	1E-02	4E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-01	NA	2E-03	1E-01
			(Total)	2.1E-06	NC	7.2E-08	2.2E-06	(Total)		9E-01	NC	5E-02	1E+00
Groundwater	Groundwater	Property 5007	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	9E-04	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	1E-02	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	1E-02	1E-01

Total Risk Across Soil	2.2E-06	Total Hazard Index Across Soil	1E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E-01
Total Risk Across All Media and All Exposure Routes	2.2E-06	Total Hazard Index Across All Media and All Exposure Routes	1E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	8.3E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	3.0E-06

Total CNS HI =	1E-01
Total Lifetime HI =	2E-01
Total Blood HI =	3E-01
Total Skin/Vascular HI =	2E-01
Total Kidney HI =	2E-01
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1j Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 5008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5008	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	6E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	9E-03	NA	2E-03	1E-02
			Arsenic	4.0E-06	NA	4.8E-07	4.5E-06	Arsenic	Skin/Vascular	3E-02	NA	3E-03	3E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-03	NA	3E-03	9E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-03	NA	6E-04	4E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	6E-02	NA	3E-03	7E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-03	NA	7E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-03	NA	4E-05	1E-03
			(Total)	4.0E-06	NC	4.8E-07	4.5E-06	(Total)		2E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 5008	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-02	NA	5E-03	7E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		7E-02	NC	5E-03	7E-02

Total Risk Across Soil	4.5E-06	Total Hazard Index Across Soil	2E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	7E-02
Total Risk Across All Media and All Exposure Routes	4.5E-06	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.0E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total CNS HI =	4E-02
Total Lifetime HI =	2E-02
Total Blood HI =	1E-02
Total Skin/Vascular HI =	3E-02
Total Kidney HI =	9E-02
Total Thyroid HI =	7E-02
Total Gastrointestinal Tract HI =	3E-02

Table 9.1j Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 5008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5008	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-03	NA	6E-05	5E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	3E-03	NA	2E-04	3E-03
			Arsenic	4.1E-07	NA	1.4E-08	4.2E-07	Arsenic	Skin/Vascular	9E-03	NA	3E-04	9E-03
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-03	NA	3E-04	2E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-03	NA	6E-05	1E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	3E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-03	NA	1E-03	5E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	7E-04	2E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-04	NA	4E-06	4E-04
			(Total)	4.1E-07	NC	1.4E-08	4.2E-07	(Total)		6E-02	NC	3E-03	6E-02
Groundwater	Groundwater	Property 5008	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	2E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		3E-02	NC	2E-03	3E-02

Total Risk Across Soil	4.2E-07	Total Hazard Index Across Soil	6E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-02
Total Risk Across All Media and All Exposure Routes	4.2E-07	Total Hazard Index Across All Media and All Exposure Routes	1E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.1E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.6E-06

Total CNS HI =	1E-02
Total Lifetime HI =	6E-03
Total Blood HI =	4E-03
Total Skin/Vascular HI =	9E-03
Total Kidney HI =	4E-02
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1j Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 5008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5008	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	4E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	8E-02	NA	2E-02	1E-01
			Arsenic	9.4E-06	NA	7.9E-07	1.0E-05	Arsenic	Skin/Vascular	2E-01	NA	2E-02	3E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-02	NA	2E-02	7E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-02	NA	4E-03	4E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	6E-01	NA	2E-02	6E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	8E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	7E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-02	NA	4E-02	9E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-02	NA	3E-04	1E-02
			(Total)	9.4E-06	NC	7.9E-07	1.0E-05	(Total)		2E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 5008	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	1E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	1E-02	2E-01

Total Risk Across Soil	1.0E-05	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	1.0E-05	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	4.5E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total CNS HI =	3E-01
Total Lifetime HI =	2E-01
Total Blood HI =	1E-01
Total Skin/Vascular HI =	3E-01
Total Kidney HI =	3E-01
Total Thyroid HI =	6E-01
Total Gastrointestinal Tract HI =	3E-01

Table 9.1j Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 5008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5008	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	5E-04	5E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	3E-02	NA	2E-03	3E-02
			Arsenic	1.1E-06	NA	3.7E-08	1.1E-06	Arsenic	Skin/Vascular	9E-02	NA	3E-03	9E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	3E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-02	NA	5E-04	1E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-02	NA	1E-02	4E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-02	NA	6E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-03	NA	4E-05	3E-03
			(Total)	1.1E-06	NC	3.7E-08	1.1E-06	(Total)		6E-01	NC	3E-02	6E-01
Groundwater	Groundwater	Property 5008	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	3E-03	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		4E-02	NC	3E-03	5E-02

Total Risk Across Soil	1.1E-06	Total Hazard Index Across Soil	6E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	5E-02
Total Risk Across All Media and All Exposure Routes	1.1E-06	Total Hazard Index Across All Media and All Exposure Routes	6E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	4.2E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	1.6E-06

Total CNS HI =	9E-02
Total Lifetime HI =	5E-02
Total Blood HI =	3E-02
Total Skin/Vascular HI =	9E-02
Total Kidney HI =	8E-02
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1k Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 5012
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5012	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	5E-04	1E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-02	NA	5E-03	3E-02
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	6E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	7E-03	NA	1E-03	8E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	8E-02	NA	3E-03	8E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-02	NA	2E-03	4E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-03	NA	6E-03	9E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-03	NA	5E-05	1E-03
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 5012	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	2E-01
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	4E-02
Total Lifetime HI =	3E-02
Total Blood HI =	3E-02
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-02
Total Thyroid HI =	8E-02
Total Gastrointestinal Tract HI =	4E-02

Notes:
NA = not available
NC = not calculated

Table 9.1k Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 5012
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5012	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	4E-03	NA	5E-05	5E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	7E-03	NA	5E-04	7E-03
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-03	NA	6E-04	4E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	1E-04	2E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-02	NA	3E-04	3E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	2E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-03	NA	1E-03	5E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-03	NA	6E-04	2E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-04	NA	5E-06	4E-04
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		7E-02	NC	3E-03	7E-02
Groundwater	Groundwater	Property 5012	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	7E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	7E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	1E-02
Total Lifetime HI =	9E-03
Total Blood HI =	8E-03
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	7E-03
Total Thyroid HI =	3E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1k Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 5012
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5012	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	3E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-01	NA	3E-02	2E-01
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-01	NA	4E-02	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-02	NA	7E-03	7E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	8E-01	NA	2E-02	8E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-01	NA	1E-02	4E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	8E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-02	NA	4E-02	7E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-02	NA	3E-04	1E-02
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 5012	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	3E-01
Total Lifetime HI =	3E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	8E-01
Total Gastrointestinal Tract HI =	4E-01

Table 9.1k Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 5012
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5012	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	4E-02	NA	5E-04	4E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	6E-02	NA	5E-03	7E-02
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	5E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	1E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-01	NA	3E-03	3E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-02	NA	1E-02	5E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-02	NA	5E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-03	NA	4E-05	4E-03
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		6E-01	NC	3E-02	6E-01
Groundwater	Groundwater	Property 5012	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	6E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	6E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	9E-02
Total Lifetime HI =	9E-02
Total Blood HI =	7E-02
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	6E-02
Total Thyroid HI =	3E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1l Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 5013
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5013	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	7E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-02	NA	9E-03	5E-02
			Arsenic	8.7E-06	NA	1.0E-06	9.8E-06	Arsenic	Skin/Vascular	6E-02	NA	7E-03	6E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-03	NA	4E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-03	NA	1E-03	1E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	7E-02	NA	3E-03	7E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	5E-02	NA	2E-03	5E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	8E-03	NA	1E-02	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	6E-03	NA	2E-04	6E-03
			(Total)	8.7E-06	NC	1.0E-06	9.8E-06	(Total)		3E-01	NC	5E-02	3E-01
Groundwater	Groundwater	Property 5013	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	9.8E-06	Total Hazard Index Across Soil	3E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	9.8E-06	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.2E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	3.2E-05

Total CNS HI =	5E-02
Total Lifetime HI =	7E-02
Total Blood HI =	5E-02
Total Skin/Vascular HI =	6E-02
Total Kidney HI =	2E-02
Total Thyroid HI =	7E-02
Total Gastrointestinal Tract HI =	5E-02

Table 9.1l Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 5013
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5013	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-03	NA	7E-05	6E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	9E-04	1E-02
			Arsenic	8.9E-07	NA	3.0E-08	9.2E-07	Arsenic	Skin/Vascular	2E-02	NA	7E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-03	NA	4E-04	3E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-03	NA	1E-04	3E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	3E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-02	NA	2E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-03	NA	1E-03	6E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-03	NA	1E-03	4E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	2E-05	2E-03
			(Total)	8.9E-07	NC	3.0E-08	9.2E-07	(Total)		9E-02	NC	5E-03	1E-01
Groundwater	Groundwater	Property 5013	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	9.2E-07	Total Hazard Index Across Soil	1E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	9.2E-07	Total Hazard Index Across All Media and All Exposure Routes	1E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.5E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	3.4E-06

Total CNS HI =	1E-02
Total Lifetime HI =	2E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	6E-03
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	2E-02

Table 9.1l Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 5013
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5013	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	4E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	3E-01	NA	6E-02	4E-01
			Arsenic	2.0E-05	NA	1.7E-06	2.2E-05	Arsenic	Skin/Vascular	5E-01	NA	4E-02	6E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-02	NA	2E-02	8E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-02	NA	9E-03	9E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	7E-01	NA	2E-02	7E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	5E-01	NA	1E-02	5E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	9E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	7E-02	NA	8E-02	2E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-02	NA	1E-03	5E-02
			(Total)	2.0E-05	NC	1.7E-06	2.2E-05	(Total)		3E+00	NC	3E-01	3E+00
Groundwater	Groundwater	Property 5013	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.2E-05	Total Hazard Index Across Soil	3E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	2.2E-05	Total Hazard Index Across All Media and All Exposure Routes	3E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	9.8E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	3.2E-05

Total CNS HI =	4E-01
Total Lifetime HI =	5E-01
Total Blood HI =	4E-01
Total Skin/Vascular HI =	6E-01
Total Kidney HI =	2E-01
Total Thyroid HI =	7E-01
Total Gastrointestinal Tract HI =	5E-01

Table 9.1l Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 5013
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5013	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	6E-04	5E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	9E-03	1E-01
			Arsenic	2.4E-06	NA	8.0E-08	2.5E-06	Arsenic	Skin/Vascular	2E-01	NA	6E-03	2E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	3E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-02	NA	1E-03	3E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	3E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-01	NA	2E-03	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-02	NA	1E-02	6E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-02	NA	1E-02	4E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-02	NA	2E-04	2E-02
			(Total)	2.4E-06	NC	8.0E-08	2.5E-06	(Total)		9E-01	NC	5E-02	9E-01
Groundwater	Groundwater	Property 5013	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.5E-06	Total Hazard Index Across Soil	9E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	2.5E-06	Total Hazard Index Across All Media and All Exposure Routes	9E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	9.2E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	3.4E-06

Total CNS HI =	1E-01
Total Lifetime HI =	2E-01
Total Blood HI =	1E-01
Total Skin/Vascular HI =	2E-01
Total Kidney HI =	5E-02
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	2E-01

Table 9.1m Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 5014
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5014	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 5014	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	2E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-02	NC	2E-03	3E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	3E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1m Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 5014
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5014	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 5014	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	5E-04	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-02	NC	5E-04	1E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	1E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1m Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 5014
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5014	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 5014	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-02	NA	5E-03	6E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		6E-02	NC	5E-03	6E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	6E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	6E-02

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	6E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1m Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 5014
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5014	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 5014	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	1E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-02	NC	1E-03	2E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-02

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1n Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20008	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20008	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-02	NA	5E-03	7E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		3E-01	NC	3E-02	3E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	3E-01
Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1n Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20008	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20008	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	2E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	8E-03	1E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	1E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1n Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20008	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20008	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	2E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		7E-01	NC	8E-02	8E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	8E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	8E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	8E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1n Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20008	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20008	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	3E-03	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1o Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20027
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20027	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20027	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-02	NA	6E-03	8E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		3E-01	NC	3E-02	3E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	3E-01
Total Hazard Index Across All Media and All Exposure Routes	3E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1o Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20027
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20027	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20027	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	2E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	9E-03	2E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	2E-01
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1o Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20027
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20027	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20027	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	2E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		8E-01	NC	8E-02	8E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	8E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	8E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	8E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1o Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20027
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20027	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20027	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-02	NA	4E-03	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	2E-01
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1p Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20028
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20028	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	7E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-02	NA	5E-03	2E-02
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-03	NA	2E-03	6E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-03	NA	5E-04	4E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-02	NA	2E-03	6E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	6E-03	NA	9E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	8E-05	2E-03
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 20028	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	2E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	4E-02
Total Lifetime HI =	4E-02
Total Blood HI =	3E-02
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E-02
Total Thyroid HI =	6E-02
Total Gastrointestinal Tract HI =	3E-02

Table 9.1p Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20028
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20028	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-03	NA	7E-05	6E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	7E-03	NA	5E-04	7E-03
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-03	NA	2E-04	2E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-03	NA	5E-05	1E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-03	NA	1E-03	5E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	9E-04	3E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	7E-04	NA	8E-06	7E-04
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-02	NC	3E-03	6E-02
Groundwater	Groundwater	Property 20028	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	6E-02
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	6E-02
Total CNS HI =	1E-02
Total Lifetime HI =	1E-02
Total Blood HI =	8E-03
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-03
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	1E-02

Notes:
NA = not available
NC = not calculated

Table 9.1p Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20028
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20028	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	5E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-01	NA	3E-02	2E-01
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	1E-02	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-02	NA	3E-03	3E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-01	NA	1E-02	5E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	9E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	7E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	6E-02	NA	6E-02	1E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-02	NA	5E-04	2E-02
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 20028	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	3E-01
Total Lifetime HI =	3E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	8E-02
Total Thyroid HI =	5E-01
Total Gastrointestinal Tract HI =	3E-01

Table 9.1p Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20028
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20028	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-02	NA	7E-04	6E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	6E-02	NA	5E-03	7E-02
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-02	NA	5E-04	1E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-02	NA	1E-02	5E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	9E-03	3E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	6E-03	NA	7E-05	7E-03
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-01	NC	3E-02	5E-01
Groundwater	Groundwater	Property 20028	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	5E-01
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	5E-01
Total CNS HI =	1E-01
Total Lifetime HI =	9E-02
Total Blood HI =	7E-02
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-02
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	1E-01

Notes:
NA = not available
NC = not calculated

Table 9.1q Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20070
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20070	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	7E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	6.4E-06	NA	7.7E-07	7.2E-06	Arsenic	Skin/Vascular	4E-02	NA	5E-03	5E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-03	NA	2E-03	5E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-02	NA	1E-03	3E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-03	NA	7E-03	1E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	9E-03	NA	1E-02	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	9E-04	NA	3E-05	9E-04
			(Total)	6.4E-06	NC	7.7E-07	7.2E-06	(Total)		1E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 20070	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	7.2E-06	Total Hazard Index Across Soil	2E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	7.2E-06	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.6E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	2.3E-05

Total CNS HI =	3E-02
Total Lifetime HI =	2E-02
Total Blood HI =	9E-04
Total Skin/Vascular HI =	5E-02
Total Kidney HI =	5E-03
Total Thyroid HI =	3E-02
Total Gastrointestinal Tract HI =	3E-02

Table 9.1q Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20070
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20070	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-03	NA	7E-05	6E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	6.5E-07	NA	2.2E-08	6.8E-07	Arsenic	Skin/Vascular	1E-02	NA	5E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-03	NA	2E-04	1E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-02	NA	1E-04	1E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-03	NA	7E-04	3E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-03	NA	1E-03	4E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-04	NA	3E-06	3E-04
			(Total)	6.5E-07	NC	2.2E-08	6.8E-07	(Total)		5E-02	NC	3E-03	5E-02
Groundwater	Groundwater	Property 20070	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	6.8E-07	Total Hazard Index Across Soil	5E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	6.8E-07	Total Hazard Index Across All Media and All Exposure Routes	5E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.8E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.5E-06

Total CNS HI =	1E-02
Total Lifetime HI =	4E-03
Total Blood HI =	3E-04
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	1E-03
Total Thyroid HI =	1E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1q Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20070
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20070	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	5E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.5E-05	NA	1.3E-06	1.6E-05	Arsenic	Skin/Vascular	4E-01	NA	3E-02	4E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	1E-02	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-01	NA	8E-03	3E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	9E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-02	NA	5E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	8E-02	NA	9E-02	2E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	8E-03	NA	2E-04	8E-03
			(Total)	1.5E-05	NC	1.3E-06	1.6E-05	(Total)		1E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 20070	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.6E-05
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	1.6E-05
Total Adult Risk Across All Media and All Exposure Routes	7.2E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.3E-05

Total Hazard Index Across Soil	2E+00
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	2E+00
Total CNS HI =	3E-01
Total Lifetime HI =	2E-01
Total Blood HI =	8E-03
Total Skin/Vascular HI =	4E-01
Total Kidney HI =	4E-02
Total Thyroid HI =	3E-01
Total Gastrointestinal Tract HI =	3E-01

Notes:
NA = not available
NC = not calculated

Table 9.1q Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20070
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20070	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-02	NA	7E-04	6E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.7E-06	NA	5.9E-08	1.8E-06	Arsenic	Skin/Vascular	1E-01	NA	5E-03	1E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-01	NA	1E-03	1E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	7E-03	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-02	NA	1E-02	4E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-03	NA	3E-05	3E-03
			(Total)	1.7E-06	NC	5.9E-08	1.8E-06	(Total)		5E-01	NC	3E-02	5E-01
Groundwater	Groundwater	Property 20070	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.8E-06	Total Hazard Index Across Soil	5E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.8E-06	Total Hazard Index Across All Media and All Exposure Routes	5E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	6.8E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	2.5E-06

Total CNS HI =	9E-02
Total Lifetime HI =	4E-02
Total Blood HI =	3E-03
Total Skin/Vascular HI =	1E-01
Total Kidney HI =	1E-02
Total Thyroid HI =	1E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1r Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20108
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20108	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20108	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1r Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20108
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20108	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20108	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1r Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20108
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20108	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20108	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1r Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20108
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20108	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20108	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1s Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20171
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20171	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20171	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1s Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20171
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20171	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20171	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1s Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20171
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20171	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20171	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1s Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20171
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20171	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20171	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1t Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20173
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20173	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20173	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1t Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20173
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20173	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20173	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1t Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20173
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20173	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20173	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1t Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20173
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20173	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20173	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1u Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20187
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20187	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20187	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1u Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20187
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20187	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20187	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1u Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20187
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20187	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20187	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1u Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20187
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20187	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20187	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1v Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20331
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20331	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-02	NA	1E-03	3E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	5E-02	NA	1E-02	7E-02
			Arsenic	8.0E-06	NA	9.6E-07	9.0E-06	Arsenic	Skin/Vascular	5E-02	NA	6E-03	6E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-03	NA	1E-03	3E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-02	NA	2E-03	5E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-02	NA	2E-03	5E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	6E-03	NA	6E-03	1E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	9E-03	NA	1E-02	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-04	NA	2E-05	5E-04
			(Total)	8.0E-06	NC	9.6E-07	9.0E-06	(Total)		3E-01	NC	5E-02	3E-01
Groundwater	Groundwater	Property 20331	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	9.0E-06	Total Hazard Index Across Soil	3E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	9.0E-06	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	8.5E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	9.8E-06

Total CNS HI =	4E-02
Total Lifetime HI =	9E-02
Total Blood HI =	7E-02
Total Skin/Vascular HI =	6E-02
Total Kidney HI =	3E-03
Total Thyroid HI =	5E-02
Total Gastrointestinal Tract HI =	5E-02

Table 9.1v Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20331
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20331	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	1E-04	1E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-02	NA	1E-03	2E-02
			Arsenic	8.2E-07	NA	2.8E-08	8.5E-07	Arsenic	Skin/Vascular	2E-02	NA	6E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-04	NA	1E-04	9E-04
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-02	NA	2E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-03	NA	6E-04	3E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-03	NA	1E-03	5E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-04	NA	2E-06	2E-04
			(Total)	8.2E-07	NC	2.8E-08	8.5E-07	(Total)		9E-02	NC	5E-03	9E-02
Groundwater	Groundwater	Property 20331	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	8.5E-07	Total Hazard Index Across Soil	9E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	8.5E-07	Total Hazard Index Across All Media and All Exposure Routes	9E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.3E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	3.1E-06

Total CNS HI =	1E-02
Total Lifetime HI =	3E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	9E-04
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	2E-02

Table 9.1v Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20331
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20331	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-01	NA	7E-03	3E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	5E-01	NA	9E-02	6E-01
			Arsenic	8.2E-07	NA	2.8E-08	8.5E-07	Arsenic	Skin/Vascular	5E-01	NA	4E-02	5E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	8E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-01	NA	1E-02	5E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-01	NA	1E-02	4E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	6E-02	NA	4E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	9E-02	NA	9E-02	2E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-03	NA	1E-04	5E-03
			(Total)	8.2E-07	NC	2.8E-08	8.5E-07	(Total)		2E+00	NC	3E-01	3E+00
Groundwater	Groundwater	Property 20331	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	8.5E-07	Total Hazard Index Across Soil	3E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	8.5E-07	Total Hazard Index Across All Media and All Exposure Routes	3E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	9.0E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	9.8E-06

Total CNS HI =	4E-01
Total Lifetime HI =	8E-01
Total Blood HI =	6E-01
Total Skin/Vascular HI =	5E-01
Total Kidney HI =	3E-02
Total Thyroid HI =	5E-01
Total Gastrointestinal Tract HI =	4E-01

Table 9.1v Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20331
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20331	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	9E-02	NA	1E-03	9E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-01	NA	1E-02	2E-01
			Arsenic	2.2E-06	NA	7.3E-08	2.3E-06	Arsenic	Skin/Vascular	2E-01	NA	6E-03	2E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-03	NA	1E-03	8E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	2E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	6E-03	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-02	NA	1E-02	4E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	2E-05	2E-03
			(Total)	2.2E-06	NC	7.3E-08	2.3E-06	(Total)		8E-01	NC	4E-02	9E-01
Groundwater	Groundwater	Property 20331	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.3E-06	Total Hazard Index Across Soil	9E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	2.3E-06	Total Hazard Index Across All Media and All Exposure Routes	9E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	8.5E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	3.1E-06

Total CNS HI =	1E-01
Total Lifetime HI =	2E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	2E-01
Total Kidney HI =	8E-03
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1w Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20349
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20349	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	6E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.1E-05	NA	1.3E-06	1.2E-05	Arsenic	Skin/Vascular	7E-02	NA	8E-03	8E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-03	NA	9E-04	3E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-03	NA	1E-03	7E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	6E-02	NA	2E-03	6E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	5E-02	NA	2E-03	5E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	8E-03	NA	8E-03	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	7E-03	NA	1E-02	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	8E-05	2E-03
			(Total)	1.1E-05	NC	1.3E-06	1.2E-05	(Total)		2E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 20349	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.2E-05	Total Hazard Index Across Soil	2E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.2E-05	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.7E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	3.9E-05

Total CNS HI =	3E-02
Total Lifetime HI =	2E-02
Total Blood HI =	2E-03
Total Skin/Vascular HI =	8E-02
Total Kidney HI =	1E-02
Total Thyroid HI =	6E-02
Total Gastrointestinal Tract HI =	5E-02

Table 9.1w Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20349
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20349	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-03	NA	6E-05	6E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.1E-06	NA	1.1E-06	2.2E-06	Arsenic	Skin/Vascular	2E-02	NA	8E-04	3E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-04	NA	9E-05	7E-04
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	1E-04	2E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-02	NA	2E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-03	NA	8E-04	4E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	1E-03	3E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	7E-04	NA	8E-06	7E-04
			(Total)	1.1E-06	NC	1.1E-06	2.2E-06	(Total)		8E-02	NC	3E-03	8E-02
Groundwater	Groundwater	Property 20349	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.2E-06	Total Hazard Index Across Soil	8E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	2.2E-06	Total Hazard Index Across All Media and All Exposure Routes	8E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	3.0E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	5.2E-06

Total CNS HI =	9E-03
Total Lifetime HI =	3E-03
Total Blood HI =	7E-04
Total Skin/Vascular HI =	3E-02
Total Kidney HI =	3E-03
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	2E-02

Table 9.1w Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20349
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20349	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	4E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	2.5E-05	NA	2.1E-06	2.7E-05	Arsenic	Skin/Vascular	7E-01	NA	5E-02	7E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	6E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-02	NA	6E-03	6E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-01	NA	2E-02	6E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-01	NA	1E-02	5E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	8E-02	NA	5E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	6E-02	NA	7E-02	1E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-02	NA	5E-04	2E-02
			(Total)	2.5E-05	NC	2.1E-06	2.7E-05	(Total)		2E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 20349	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.7E-05	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	2.7E-05	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	1.2E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	3.9E-05

Total CNS HI =	3E-01
Total Lifetime HI =	1E-01
Total Blood HI =	2E-02
Total Skin/Vascular HI =	7E-01
Total Kidney HI =	8E-02
Total Thyroid HI =	6E-01
Total Gastrointestinal Tract HI =	5E-01

Table 9.1w Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20349
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20349	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	6E-04	5E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	2.9E-06	NA	9.9E-08	3.0E-06	Arsenic	Skin/Vascular	2E-01	NA	8E-03	2E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-03	NA	8E-04	6E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	9E-04	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-01	NA	2E-03	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-02	NA	7E-03	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	9E-03	3E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	6E-03	NA	7E-05	6E-03
			(Total)	2.9E-06	NC	9.9E-08	3.0E-06	(Total)		7E-01	NC	3E-02	7E-01
Groundwater	Groundwater	Property 20349	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	3.0E-06	Total Hazard Index Across Soil	7E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	3.0E-06	Total Hazard Index Across All Media and All Exposure Routes	7E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	2.2E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	5.2E-06

Total CNS HI =	9E-02
Total Lifetime HI =	3E-02
Total Blood HI =	6E-03
Total Skin/Vascular HI =	2E-01
Total Kidney HI =	3E-02
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	2E-01

Table 9.1x Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20397
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20397	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20397	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1x Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20397
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20397	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20397	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1x Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20397
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20397	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20397	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1x Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20397
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20397	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20397	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1y Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20428
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20428	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20428	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1y Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20428
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20428	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20428	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1y Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20428
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20428	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20428	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1y Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20428
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20428	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20428	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1z Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20437
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20437	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20437	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	9E-02	NA	7E-03	9E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-01	NA	3E-02	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		4E-01	NC	4E-02	4E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	4E-01
Total Hazard Index Across All Media and All Exposure Routes	4E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	4E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1z Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20437
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20437	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20437	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	2E-03	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	9E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	1E-02	2E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1z Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20437
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20437	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20437	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	2E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	7E-01	NA	8E-02	8E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		9E-01	NC	1E-01	1E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	1E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1z Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20437
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20437	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20437	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-02	NA	4E-03	6E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	3E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1aa Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20758
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20758	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20758	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1aa Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20758
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20758	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20758	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1aa Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20758
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20758	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20758	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1aa Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20758
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20758	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20758	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1bb Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20767
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20767	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20767	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-02	NA	6E-03	9E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		8E-02	NC	6E-03	9E-02

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	9E-02
Total Hazard Index Across All Media and All Exposure Routes	9E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	9E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1bb Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20767
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20767	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20767	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	2E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		4E-02	NC	2E-03	4E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	4E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	4E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	4E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1bb Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20767
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20767	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20767	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	2E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	2E-01
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1bb Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20767
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20767	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 20767	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-02	NA	4E-03	6E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-02	NC	4E-03	6E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	6E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	6E-02

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	6E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1cc Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 20918
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20918	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	5E-04	1E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-02	NA	6E-03	3E-02
			Arsenic	8.1E-06	NA	9.7E-07	9.1E-06	Arsenic	Skin/Vascular	5E-02	NA	6E-03	6E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	5E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-02	NA	2E-03	1E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	6E-02	NA	2E-03	6E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	5E-02	NA	2E-03	6E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	8E-03	NA	8E-03	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-03	NA	8E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	6E-03	NA	3E-04	7E-03
			(Total)	8.1E-06	NC	9.7E-07	9.1E-06	(Total)		2E-01	NC	4E-02	3E-01
Groundwater	Groundwater	Property 20918	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	9.1E-06	Total Hazard Index Across Soil	3E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	9.1E-06	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.0E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	3.0E-05

Total CNS HI =	3E-02
Total Lifetime HI =	4E-02
Total Blood HI =	4E-02
Total Skin/Vascular HI =	6E-02
Total Kidney HI =	3E-02
Total Thyroid HI =	6E-02
Total Gastrointestinal Tract HI =	6E-02

Table 9.1cc Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 20918
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20918	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	4E-03	NA	5E-05	4E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	8E-03	NA	6E-04	9E-03
			Arsenic	8.3E-07	NA	2.8E-08	8.6E-07	Arsenic	Skin/Vascular	2E-02	NA	6E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-03	NA	5E-04	4E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-03	NA	2E-04	4E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-02	NA	2E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-03	NA	8E-04	4E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	8E-04	3E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	3E-05	2E-03
			(Total)	8.3E-07	NC	2.8E-08	8.6E-07	(Total)		8E-02	NC	4E-03	9E-02
Groundwater	Groundwater	Property 20918	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	8.6E-07
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	8.6E-07
Total Hazard Index Across Soil	9E-02
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	9E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.3E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	3.1E-06

Total CNS HI =	8E-03
Total Lifetime HI =	1E-02
Total Blood HI =	1E-02
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	8E-03
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	2E-02

Table 9.1cc Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 20918
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20918	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	3E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-01	NA	4E-02	3E-01
			Arsenic	1.9E-05	NA	1.6E-06	2.0E-05	Arsenic	Skin/Vascular	5E-01	NA	4E-02	5E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	9E-02	NA	4E-02	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	1E-02	1E-01
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-01	NA	2E-02	6E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	5E-01	NA	1E-02	5E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-02	NA	5E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-02	NA	5E-02	1E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	6E-02	NA	2E-03	6E-02
			(Total)	1.9E-05	NC	1.6E-06	2.0E-05	(Total)		2E+00	NC	3E-01	3E+00
Groundwater	Groundwater	Property 20918	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.0E-05	Total Hazard Index Across Soil	3E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	2.0E-05	Total Hazard Index Across All Media and All Exposure Routes	3E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	9.1E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	3.0E-05

Total CNS HI =	2E-01
Total Lifetime HI =	4E-01
Total Blood HI =	3E-01
Total Skin/Vascular HI =	5E-01
Total Kidney HI =	2E-01
Total Thyroid HI =	6E-01
Total Gastrointestinal Tract HI =	5E-01

Table 9.1cc Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 20918
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20918	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	4E-02	NA	5E-04	4E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	7E-02	NA	6E-03	8E-02
			Arsenic	2.2E-06	NA	7.4E-08	2.3E-06	Arsenic	Skin/Vascular	2E-01	NA	6E-03	2E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	5E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-02	NA	2E-03	4E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-01	NA	2E-03	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-02	NA	7E-03	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	8E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-02	NA	2E-04	2E-02
			(Total)	2.2E-06	NC	7.4E-08	2.3E-06	(Total)		8E-01	NC	4E-02	8E-01
Groundwater	Groundwater	Property 20918	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.3E-06	Total Hazard Index Across Soil	8E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	2.3E-06	Total Hazard Index Across All Media and All Exposure Routes	8E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	8.6E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	3.1E-06

Total CNS HI =	7E-02
Total Lifetime HI =	1E-01
Total Blood HI =	1E-01
Total Skin/Vascular HI =	2E-01
Total Kidney HI =	8E-02
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	2E-01

Table 9.1dd Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 23264
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23264	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 23264	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	9E-04	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	2E-01
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1dd Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 23264
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23264	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 23264	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-03	NA	3E-04	6E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-02	NA	5E-03	9E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		9E-02	NC	5E-03	9E-02

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	9E-02
Total Hazard Index Across All Media and All Exposure Routes	9E-02
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	9E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1dd Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 23264
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23264	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 23264	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	3E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-01	NA	5E-02	5E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-01	NC	5E-02	5E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	5E-01
Total Hazard Index Across All Media and All Exposure Routes	5E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	5E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1dd Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 23264
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23264	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 23264	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-03	NA	6E-04	8E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	1E-02	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	1E-02	1E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	1E-01
Total Hazard Index Across All Media and All Exposure Routes	1E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1ee Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 23378
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23378	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	8E-03	NA	3E-04	8E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	8E-02	NA	2E-02	1E-01
			Arsenic	4.2E-06	NA	5.1E-07	4.7E-06	Arsenic	Skin/Vascular	3E-02	NA	3E-03	3E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-03	NA	4E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	3E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	6E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-02	NA	2E-03	4E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-02	NA	3E-02	5E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	3E-03	5E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-03	NA	1E-04	3E-03
			(Total)	4.2E-06	NC	5.1E-07	4.7E-06	(Total)		4E-01	NC	7E-02	4E-01
Groundwater	Groundwater	Property 23378	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	9E-04	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	4.7E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	4.7E-06
Total Child Risk Across All Media and All Exposure Routes	1.1E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total Hazard Index Across Soil	4E-01
Total Hazard Index Across Groundwater	2E-01
Total Hazard Index Across All Media and All Exposure Routes	6E-01
Total CNS HI =	6E-02
Total Lifetime HI =	1E-01
Total Blood HI =	1E-01
Total Skin/Vascular HI =	3E-02
Total Kidney HI =	2E-01
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	4E-02

Notes:
NA = not available
NC = not calculated

Table 9.1ee Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 23378
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23378	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-03	NA	3E-05	3E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	3E-02	NA	2E-03	3E-02
			Arsenic	4.3E-07	NA	1.5E-08	4.5E-07	Arsenic	Skin/Vascular	1E-02	NA	3E-04	1E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-03	NA	4E-04	3E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-03	NA	3E-04	6E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	6E-02	NA	6E-04	6E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	2E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	9E-03	NA	3E-03	1E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	7E-04	NA	3E-04	1E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-03	NA	1E-05	1E-03
			(Total)	4.3E-07	NC	1.5E-08	4.5E-07	(Total)		1E-01	NC	7E-03	1E-01
Groundwater	Groundwater	Property 23378	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-03	NA	3E-04	6E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-02	NA	5E-03	9E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		9E-02	NC	5E-03	9E-02

Total Risk Across Soil	4.5E-07	Total Hazard Index Across Soil	1E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	9E-02
Total Risk Across All Media and All Exposure Routes	4.5E-07	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.2E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.6E-06

Total CNS HI =	1E-02
Total Lifetime HI =	3E-02
Total Blood HI =	3E-02
Total Skin/Vascular HI =	1E-02
Total Kidney HI =	1E-01
Total Thyroid HI =	6E-02
Total Gastrointestinal Tract HI =	2E-02

Table 9.1ee Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 23378
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23378	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	7E-02	NA	2E-03	8E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	7E-01	NA	1E-01	9E-01
			Arsenic	9.9E-06	NA	8.3E-07	1.1E-05	Arsenic	Skin/Vascular	3E-01	NA	2E-02	3E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-02	NA	2E-02	8E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E+00	NA	4E-02	2E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-01	NA	1E-02	4E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-01	NA	2E-01	4E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	2E-02	4E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-02	NA	8E-04	3E-02
			(Total)	9.9E-06	NC	8.3E-07	1.1E-05	(Total)		3E+00	NC	4E-01	4E+00
Groundwater	Groundwater	Property 23378	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	3E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-01	NA	5E-02	5E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-01	NC	5E-02	5E-01

Total Risk Across Soil	1.1E-05
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	1.1E-05
Total Adult Risk Across All Media and All Exposure Routes	4.7E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total Hazard Index Across Soil	4E+00
Total Hazard Index Across Groundwater	5E-01
Total Hazard Index Across All Media and All Exposure Routes	4E+00
Total CNS HI =	5E-01
Total Lifetime HI =	9E-01
Total Blood HI =	9E-01
Total Skin/Vascular HI =	3E-01
Total Kidney HI =	8E-01
Total Thyroid HI =	2E+00
Total Gastrointestinal Tract HI =	4E-01

Notes:
NA = not available
NC = not calculated

Table 9.1ee Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 23378
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23378	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-02	NA	3E-04	3E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	3E-01	NA	2E-02	3E-01
			Arsenic	1.2E-06	NA	3.9E-08	1.2E-06	Arsenic	Skin/Vascular	9E-02	NA	3E-03	9E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	3E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	5E-02	NA	2E-03	5E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-01	NA	6E-03	5E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	2E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	8E-02	NA	2E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	6E-03	NA	3E-03	9E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-02	NA	1E-04	1E-02
			(Total)	1.2E-06	NC	3.9E-08	1.2E-06	(Total)		1E+00	NC	6E-02	1E+00
Groundwater	Groundwater	Property 23378	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-03	NA	6E-04	8E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	1E-02	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	1E-02	1E-01

Total Risk Across Soil	1.2E-06	Total Hazard Index Across Soil	1E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E-01
Total Risk Across All Media and All Exposure Routes	1.2E-06	Total Hazard Index Across All Media and All Exposure Routes	1E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	4.5E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	1.6E-06

Total CNS HI =	1E-01
Total Lifetime HI =	3E-01
Total Blood HI =	3E-01
Total Skin/Vascular HI =	9E-02
Total Kidney HI =	2E-01
Total Thyroid HI =	5E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1ff Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 23575
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23575	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 23575	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	2E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		3E-02	NC	2E-03	3E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	3E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1ff Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 23575
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23575	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 23575	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	7E-04	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-02	NC	7E-04	2E-02

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	2E-02
Total Hazard Index Across All Media and All Exposure Routes	2E-02
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1ff Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 23575
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23575	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 23575	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-02	NA	7E-03	9E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		8E-02	NC	7E-03	9E-02

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	9E-02
Total Hazard Index Across All Media and All Exposure Routes	9E-02
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	9E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1ff Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 23575
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23575	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 23575	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	2E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-02	NC	2E-03	2E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-02

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1gg Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30079
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30079	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	5E-04	1E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	4.0E-06	NA	4.8E-07	4.5E-06	Arsenic	Skin/Vascular	3E-02	NA	3E-03	3E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-03	NA	1E-03	3E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-03	NA	5E-04	3E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-02	NA	2E-03	5E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-03	NA	8E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	8E-05	2E-03
			(Total)	4.0E-06	NC	4.8E-07	4.5E-06	(Total)		1E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 30079	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	1E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		3E-01	NC	3E-02	4E-01

Total Risk Across Soil	4.5E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	4.5E-06
Total Child Risk Across All Media and All Exposure Routes	1.0E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total Hazard Index Across Soil	2E-01
Total Hazard Index Across Groundwater	4E-01
Total Hazard Index Across All Media and All Exposure Routes	5E-01
Total CNS HI =	4E-02
Total Lifetime HI =	1E-02
Total Blood HI =	2E-03
Total Skin/Vascular HI =	3E-02
Total Kidney HI =	4E-01
Total Thyroid HI =	5E-02
Total Gastrointestinal Tract HI =	3E-02

Notes:
NA = not available
NC = not calculated

Table 9.1gg Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30079
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30079	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-03	NA	5E-05	5E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	4.1E-07	NA	1.4E-08	4.2E-07	Arsenic	Skin/Vascular	9E-03	NA	3E-04	9E-03
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-04	NA	1E-04	8E-04
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-03	NA	5E-05	1E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-03	NA	1E-03	6E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	8E-04	3E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	7E-04	NA	8E-06	7E-04
			(Total)	4.1E-07	NC	1.4E-08	4.2E-07	(Total)		5E-02	NC	3E-03	5E-02
Groundwater	Groundwater	Property 30079	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-02	NA	4E-03	9E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-02	NA	5E-03	9E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	9E-03	2E-01

Total Risk Across Soil	4.2E-07	Total Hazard Index Across Soil	5E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	4.2E-07	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.1E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.6E-06

Total CNS HI =	1E-02
Total Lifetime HI =	3E-03
Total Blood HI =	7E-04
Total Skin/Vascular HI =	9E-03
Total Kidney HI =	2E-01
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1gg Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30079
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30079	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	3E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	9.4E-06	NA	7.9E-07	1.0E-05	Arsenic	Skin/Vascular	2E-01	NA	2E-02	3E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	7E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-02	NA	3E-03	3E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-01	NA	1E-02	5E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	7E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	8E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-02	NA	5E-02	1E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-02	NA	5E-04	2E-02
			(Total)	9.4E-06	NC	7.9E-07	1.0E-05	(Total)		1E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 30079	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-01	NA	4E-02	5E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-01	NA	5E-02	5E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		9E-01	NC	9E-02	9E-01

Total Risk Across Soil	1.0E-05	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	9E-01
Total Risk Across All Media and All Exposure Routes	1.0E-05	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	4.5E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total CNS HI =	3E-01
Total Lifetime HI =	1E-01
Total Blood HI =	2E-02
Total Skin/Vascular HI =	3E-01
Total Kidney HI =	1E+00
Total Thyroid HI =	5E-01
Total Gastrointestinal Tract HI =	3E-01

Table 9.1gg Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30079
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30079	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	4E-02	NA	5E-04	4E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.1E-06	NA	3.7E-08	1.1E-06	Arsenic	Skin/Vascular	9E-02	NA	3E-03	9E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-03	NA	1E-03	7E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-02	NA	4E-04	1E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	9E-02	NA	1E-03	9E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-02	NA	1E-02	5E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	7E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	7E-03	NA	8E-05	7E-03
			(Total)	1.1E-06	NC	3.7E-08	1.1E-06	(Total)		5E-01	NC	3E-02	5E-01
Groundwater	Groundwater	Property 30079	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-01	NA	9E-03	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	1E-02	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	1.1E-06	Total Hazard Index Across Soil	5E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	1.1E-06	Total Hazard Index Across All Media and All Exposure Routes	7E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	4.2E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	1.6E-06

Total CNS HI =	1E-01
Total Lifetime HI =	2E-02
Total Blood HI =	7E-03
Total Skin/Vascular HI =	9E-02
Total Kidney HI =	3E-01
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	9E-02

Table 9.1hh Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30126
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30126	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	7E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	4E-03	2E-02
			Arsenic	4.2E-06	NA	5.0E-07	4.7E-06	Arsenic	Skin/Vascular	3E-02	NA	3E-03	3E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	2E-02	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	3E-04	3E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	9E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-02	NA	2E-03	4E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-03	NA	7E-03	1E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-03	NA	7E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-04	NA	2E-05	5E-04
			(Total)	4.2E-06	NC	5.0E-07	4.7E-06	(Total)		2E-01	NC	4E-02	2E-01
Groundwater	Groundwater	Property 30126	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	4.7E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	4.7E-06
Total Child Risk Across All Media and All Exposure Routes	1.1E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total Hazard Index Across Soil	2E-01
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	3E-02
Total Lifetime HI =	3E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	3E-02
Total Kidney HI =	5E-02
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	4E-02

Notes:
NA = not available
NC = not calculated

Table 9.1hh Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30126
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30126	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-03	NA	7E-05	6E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	5E-03	NA	4E-04	6E-03
			Arsenic	4.2E-07	NA	1.5E-08	4.4E-07	Arsenic	Skin/Vascular	9E-03	NA	3E-04	1E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-04	NA	3E-05	8E-04
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	8E-03	NA	9E-05	8E-03
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	2E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-03	NA	7E-04	3E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	7E-04	2E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-04	NA	2E-06	2E-04
			(Total)	4.2E-07	NC	1.5E-08	4.4E-07	(Total)		6E-02	NC	4E-03	6E-02
Groundwater	Groundwater	Property 30126	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	4.4E-07
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	4.4E-07
Total Hazard Index Across Soil	6E-02
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	6E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.2E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.6E-06

Total CNS HI =	9E-03
Total Lifetime HI =	8E-03
Total Blood HI =	6E-03
Total Skin/Vascular HI =	1E-02
Total Kidney HI =	1E-02
Total Thyroid HI =	8E-03
Total Gastrointestinal Tract HI =	1E-02

Table 9.1hh Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30126
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30126	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	4E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	3E-02	2E-01
			Arsenic	9.7E-06	NA	8.1E-07	1.1E-05	Arsenic	Skin/Vascular	3E-01	NA	2E-02	3E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-01	NA	1E-01	4E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	2E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	6E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-01	NA	1E-02	4E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-02	NA	5E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-02	NA	5E-02	9E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	4E-03	NA	1E-04	4E-03
			(Total)	9.7E-06	NC	8.1E-07	1.1E-05	(Total)		2E+00	NC	3E-01	2E+00
Groundwater	Groundwater	Property 30126	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.1E-05	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.1E-05	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	4.7E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total CNS HI =	3E-01
Total Lifetime HI =	3E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	3E-01
Total Kidney HI =	4E-01
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	4E-01

Table 9.1hh Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30126
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30126	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	6E-04	6E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	5E-02	NA	4E-03	5E-02
			Arsenic	1.1E-06	NA	3.8E-08	1.2E-06	Arsenic	Skin/Vascular	9E-02	NA	3E-03	9E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-01	NA	2E-02	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	7E-03	NA	3E-04	7E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	7E-02	NA	8E-04	8E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	7E-03	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	7E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	2E-05	2E-03
			(Total)	1.1E-06	NC	3.8E-08	1.2E-06	(Total)		5E-01	NC	4E-02	6E-01
Groundwater	Groundwater	Property 30126	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.2E-06	Total Hazard Index Across Soil	6E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.2E-06	Total Hazard Index Across All Media and All Exposure Routes	6E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	4.4E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	1.6E-06

Total CNS HI =	9E-02
Total Lifetime HI =	7E-02
Total Blood HI =	5E-02
Total Skin/Vascular HI =	9E-02
Total Kidney HI =	1E-01
Total Thyroid HI =	8E-02
Total Gastrointestinal Tract HI =	1E-01

Table 9.1ii Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30172
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30172	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30172	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1ii Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30172
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30172	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30172	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1ii Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30172
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30172	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30172	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1ii Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30172
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30172	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30172	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1jj Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30177
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30177	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	9E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	6.6E-06	NA	7.9E-07	7.4E-06	Arsenic	Skin/Vascular	4E-02	NA	5E-03	5E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-03	NA	2E-03	5E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	7E-03	NA	1E-03	8E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-02	NA	2E-03	5E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	6E-02	NA	2E-03	6E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	8E-03	NA	8E-03	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	7E-03	NA	1E-02	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	7E-05	2E-03
			(Total)	6.6E-06	NC	7.9E-07	7.4E-06	(Total)		2E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 30177	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	7.4E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	7.4E-06
Total Hazard Index Across Soil	2E-01
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.7E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	2.4E-05

Total CNS HI =	4E-02
Total Lifetime HI =	2E-02
Total Blood HI =	2E-03
Total Skin/Vascular HI =	5E-02
Total Kidney HI =	1E-02
Total Thyroid HI =	5E-02
Total Gastrointestinal Tract HI =	6E-02

Table 9.1jj Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30177
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30177	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	8E-03	NA	9E-05	8E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	6.8E-07	NA	2.3E-08	7.0E-07	Arsenic	Skin/Vascular	2E-02	NA	5E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-03	NA	2E-04	1E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	1E-04	3E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-02	NA	2E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-03	NA	8E-04	4E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	1E-03	4E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	6E-04	NA	7E-06	6E-04
			(Total)	6.8E-07	NC	2.3E-08	7.0E-07	(Total)		7E-02	NC	3E-03	7E-02
Groundwater	Groundwater	Property 30177	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	7.0E-07	Total Hazard Index Across Soil	7E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	7.0E-07	Total Hazard Index Across All Media and All Exposure Routes	7E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.9E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.6E-06

Total CNS HI =	1E-02
Total Lifetime HI =	4E-03
Total Blood HI =	6E-04
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	4E-03
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	2E-02

Table 9.1jj Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30177
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30177	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	6E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.5E-05	NA	1.3E-06	1.7E-05	Arsenic	Skin/Vascular	4E-01	NA	3E-02	4E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	1E-02	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-02	NA	7E-03	7E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	4E-01	NA	1E-02	4E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	6E-01	NA	2E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-02	NA	5E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	7E-02	NA	7E-02	1E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-02	NA	4E-04	2E-02
			(Total)	1.5E-05	NC	1.3E-06	1.7E-05	(Total)		2E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 30177	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.7E-05	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.7E-05	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	7.4E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.4E-05

Total CNS HI =	3E-01
Total Lifetime HI =	1E-01
Total Blood HI =	2E-02
Total Skin/Vascular HI =	4E-01
Total Kidney HI =	1E-01
Total Thyroid HI =	4E-01
Total Gastrointestinal Tract HI =	6E-01

Table 9.1jj Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30177
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30177	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	7E-02	NA	8E-04	7E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	1.8E-06	NA	6.1E-08	1.9E-06	Arsenic	Skin/Vascular	1E-01	NA	5E-03	1E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	1E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-01	NA	2E-03	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-02	NA	7E-03	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	1E-02	3E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-03	NA	6E-05	5E-03
			(Total)	1.8E-06	NC	6.1E-08	1.9E-06	(Total)		6E-01	NC	3E-02	7E-01
Groundwater	Groundwater	Property 30177	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.9E-06	Total Hazard Index Across Soil	7E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.9E-06	Total Hazard Index Across All Media and All Exposure Routes	7E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	7.0E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	2.6E-06

Total CNS HI =	1E-01
Total Lifetime HI =	3E-02
Total Blood HI =	5E-03
Total Skin/Vascular HI =	1E-01
Total Kidney HI =	3E-02
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	2E-01

Table 9.1kk Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30182
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30182	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	7E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	3E-03	2E-02
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	2E-02	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	2E-04	2E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	4E-02	NA	2E-03	4E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	9E-03	NA	9E-03	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	6E-03	NA	9E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	8E-04	NA	3E-05	8E-04
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	4E-02	2E-01
Groundwater	Groundwater	Property 30182	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-01	NA	1E-02	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		4E-01	NC	3E-02	4E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Hazard Index Across Soil	2E-01
Total Hazard Index Across Groundwater	4E-01
Total Hazard Index Across All Media and All Exposure Routes	6E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	4E-02
Total Lifetime HI =	3E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	4E-01
Total Thyroid HI =	4E-02
Total Gastrointestinal Tract HI =	3E-02

Table 9.1kk Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30182
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30182	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-03	NA	7E-05	6E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-03	NA	3E-04	5E-03
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	5E-04	NA	2E-05	6E-04
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-03	NA	9E-04	4E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	9E-04	3E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-04	NA	3E-06	3E-04
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-02	NC	4E-03	6E-02
Groundwater	Groundwater	Property 30182	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-02	NA	3E-03	7E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	1E-02	2E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	6E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	1E-02
Total Lifetime HI =	8E-03
Total Blood HI =	5E-03
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1kk Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30182
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30182	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	4E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	2E-02	1E-01
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-01	NA	1E-01	4E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-02	NA	2E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	4E-01	NA	1E-02	4E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	7E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	9E-02	NA	6E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-02	NA	6E-02	1E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	8E-03	NA	2E-04	8E-03
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E+00	NC	3E-01	2E+00
Groundwater	Groundwater	Property 30182	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-01	NA	3E-02	4E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		9E-01	NC	1E-01	1E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	3E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	3E-01
Total Lifetime HI =	3E-01
Total Blood HI =	1E-01
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E+00
Total Thyroid HI =	4E-01
Total Gastrointestinal Tract HI =	3E-01

Table 9.1kk Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30182
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30182	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	6E-04	5E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-02	NA	3E-03	4E-02
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-01	NA	2E-02	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	5E-03	NA	2E-04	5E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-01	NA	2E-03	1E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	9E-02	NA	1E-03	9E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-02	NA	9E-03	4E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	8E-03	3E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-03	NA	3E-05	3E-03
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-01	NC	4E-02	5E-01
Groundwater	Groundwater	Property 30182	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	9E-02	NA	7E-03	9E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	3E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	5E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	8E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	9E-02
Total Lifetime HI =	7E-02
Total Blood HI =	5E-02
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	4E-01
Total Thyroid HI =	1E-01
Total Gastrointestinal Tract HI =	9E-02

Table 9.1II Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30271
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30271	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	8E-03	NA	3E-04	8E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-02	NA	6E-03	3E-02
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	6E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	5E-03	NA	7E-04	5E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	7E-02	NA	3E-03	7E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-03	NA	5E-03	8E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	8E-04	NA	3E-05	9E-04
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 30271	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	2E-01
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	3E-02
Total Lifetime HI =	3E-02
Total Blood HI =	3E-02
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-02
Total Thyroid HI =	7E-02
Total Gastrointestinal Tract HI =	3E-02

Notes:
NA = not available
NC = not calculated

Table 9.1ll Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30271
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30271	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-03	NA	3E-05	3E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	7E-03	NA	6E-04	8E-03
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-03	NA	6E-04	4E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	7E-05	2E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	3E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-03	NA	1E-03	6E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-03	NA	5E-04	2E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-04	NA	3E-06	3E-04
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-02	NC	3E-03	6E-02
Groundwater	Groundwater	Property 30271	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	6E-02
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	6E-02
Total CNS HI =	8E-03
Total Lifetime HI =	1E-02
Total Blood HI =	8E-03
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	6E-03
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	1E-02

Notes:
NA = not available
NC = not calculated

Table 9.1II Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30271
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30271	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	7E-02	NA	2E-03	8E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-01	NA	4E-02	2E-01
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	9E-02	NA	4E-02	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-02	NA	5E-03	5E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	6E-01	NA	2E-02	6E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	8E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	8E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-02	NA	3E-02	6E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	8E-03	NA	2E-04	8E-03
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 30271	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	3E-01
Total Lifetime HI =	3E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	6E-01
Total Gastrointestinal Tract HI =	3E-01

Table 9.1ll Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30271
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30271	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-02	NA	3E-04	3E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	7E-02	NA	5E-03	7E-02
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	5E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-02	NA	7E-04	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	4E-02	NA	1E-02	5E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-02	NA	4E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-03	NA	3E-05	3E-03
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		5E-01	NC	3E-02	5E-01
Groundwater	Groundwater	Property 30271	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	5E-01
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	5E-01
Total CNS HI =	8E-02
Total Lifetime HI =	9E-02
Total Blood HI =	8E-02
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	5E-02
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	1E-01

Notes:
NA = not available
NC = not calculated

Table 9.1mm Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30364
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30364	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-02	NA	1E-03	3E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	3E-03	2E-02
			Arsenic	8.6E-06	NA	1.0E-06	9.6E-06	Arsenic	Skin/Vascular	6E-02	NA	7E-03	6E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-03	NA	4E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	7E-03	NA	1E-03	8E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	4E-02	NA	2E-03	5E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	6E-02	NA	3E-03	7E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-03	NA	7E-03	1E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-02	NA	2E-02	3E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	6E-05	2E-03
			(Total)	8.6E-06	NC	1.0E-06	9.6E-06	(Total)		2E-01	NC	5E-02	3E-01
Groundwater	Groundwater	Property 30364	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	9.6E-06	Total Hazard Index Across Soil	3E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	9.6E-06	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.2E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	3.1E-05

Total CNS HI =	4E-02
Total Lifetime HI =	4E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	6E-02
Total Kidney HI =	2E-02
Total Thyroid HI =	5E-02
Total Gastrointestinal Tract HI =	7E-02

Table 9.1mm Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30364
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30364	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	9E-03	NA	1E-04	9E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-03	NA	3E-04	5E-03
			Arsenic	8.8E-07	NA	3.0E-08	9.1E-07	Arsenic	Skin/Vascular	2E-02	NA	7E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-03	NA	4E-04	3E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	1E-04	3E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-02	NA	3E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-03	NA	7E-04	3E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-03	NA	2E-03	6E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-04	NA	6E-06	5E-04
			(Total)	8.8E-07	NC	3.0E-08	9.1E-07	(Total)		8E-02	NC	5E-03	9E-02
Groundwater	Groundwater	Property 30364	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	9.1E-07	Total Hazard Index Across Soil	9E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	9.1E-07	Total Hazard Index Across All Media and All Exposure Routes	9E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.4E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	3.3E-06

Total CNS HI =	1E-02
Total Lifetime HI =	1E-02
Total Blood HI =	5E-03
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	5E-03
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	2E-02

Table 9.1mm Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30364
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30364	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	7E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	2E-02	1E-01
			Arsenic	2.0E-05	NA	1.7E-06	2.2E-05	Arsenic	Skin/Vascular	5E-01	NA	4E-02	6E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-02	NA	3E-02	9E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	7E-02	NA	7E-03	7E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	4E-01	NA	1E-02	4E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	6E-01	NA	2E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-02	NA	5E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-01	NA	1E-01	2E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-02	NA	4E-04	1E-02
			(Total)	2.0E-05	NC	1.7E-06	2.2E-05	(Total)		2E+00	NC	3E-01	2E+00
Groundwater	Groundwater	Property 30364	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.2E-05	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	2.2E-05	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	9.6E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	3.1E-05

Total CNS HI =	4E-01
Total Lifetime HI =	4E-01
Total Blood HI =	1E-01
Total Skin/Vascular HI =	6E-01
Total Kidney HI =	2E-01
Total Thyroid HI =	4E-01
Total Gastrointestinal Tract HI =	6E-01

Table 9.1mm Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30364
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30364	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	8E-02	NA	9E-04	8E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-02	NA	3E-03	4E-02
			Arsenic	2.3E-06	NA	7.9E-08	2.4E-06	Arsenic	Skin/Vascular	2E-01	NA	6E-03	2E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	4E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	1E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-01	NA	2E-03	1E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-01	NA	2E-03	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	7E-03	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-02	NA	2E-02	5E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-03	NA	6E-05	5E-03
			(Total)	2.3E-06	NC	7.9E-08	2.4E-06	(Total)		8E-01	NC	4E-02	8E-01
Groundwater	Groundwater	Property 30364	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.4E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	2.4E-06

Total Hazard Index Across Soil	8E-01
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	8E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	9.1E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	3.3E-06

Total CNS HI =	1E-01
Total Lifetime HI =	9E-02
Total Blood HI =	5E-02
Total Skin/Vascular HI =	2E-01
Total Kidney HI =	5E-02
Total Thyroid HI =	1E-01
Total Gastrointestinal Tract HI =	2E-01

Table 9.1nn Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30417
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30417	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	4E-04	1E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-02	NA	1E-02	5E-02
			Arsenic	4.6E-06	NA	5.5E-07	5.1E-06	Arsenic	Skin/Vascular	3E-02	NA	4E-03	3E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-03	NA	1E-03	3E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	8E-03	NA	1E-03	9E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	8E-02	NA	3E-03	8E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-02	NA	1E-03	4E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	2E-02	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-03	NA	5E-03	9E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	6E-05	2E-03
			(Total)	4.6E-06	NC	5.5E-07	5.1E-06	(Total)		2E-01	NC	4E-02	3E-01
Groundwater	Groundwater	Property 30417	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	5.1E-06	Total Hazard Index Across Soil	3E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	5.1E-06	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.2E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-05

Total CNS HI =	4E-02
Total Lifetime HI =	6E-02
Total Blood HI =	5E-02
Total Skin/Vascular HI =	3E-02
Total Kidney HI =	1E-02
Total Thyroid HI =	8E-02
Total Gastrointestinal Tract HI =	4E-02

Table 9.1nn Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30417
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30417	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	4E-03	NA	4E-05	4E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	1E-03	1E-02
			Arsenic	4.7E-07	NA	1.6E-08	4.8E-07	Arsenic	Skin/Vascular	1E-02	NA	4E-04	1E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-04	NA	1E-04	9E-04
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	3E-03	NA	1E-04	3E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-02	NA	3E-04	3E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-03	NA	2E-03	7E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-03	NA	5E-04	2E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-04	NA	6E-06	6E-04
			(Total)	4.7E-07	NC	1.6E-08	4.8E-07	(Total)		8E-02	NC	4E-03	8E-02
Groundwater	Groundwater	Property 30417	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	4.8E-07	Total Hazard Index Across Soil	8E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	4.8E-07	Total Hazard Index Across All Media and All Exposure Routes	8E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.3E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.8E-06

Total CNS HI =	1E-02
Total Lifetime HI =	2E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	1E-02
Total Kidney HI =	4E-03
Total Thyroid HI =	3E-02
Total Gastrointestinal Tract HI =	1E-02

Table 9.1nn Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30417
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30417	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	3E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-01	NA	7E-02	4E-01
			Arsenic	1.1E-05	NA	9.0E-07	1.2E-05	Arsenic	Skin/Vascular	3E-01	NA	2E-02	3E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	8E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	7E-02	NA	8E-03	8E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	8E-01	NA	2E-02	8E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	1E-02	4E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	1E-01	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-02	NA	3E-02	7E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-02	NA	4E-04	1E-02
			(Total)	1.1E-05	NC	9.0E-07	1.2E-05	(Total)		2E+00	NC	3E-01	2E+00
Groundwater	Groundwater	Property 30417	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.2E-05	Total Hazard Index Across Soil	2E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.2E-05	Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	5.1E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-05

Total CNS HI =	4E-01
Total Lifetime HI =	5E-01
Total Blood HI =	5E-01
Total Skin/Vascular HI =	3E-01
Total Kidney HI =	1E-01
Total Thyroid HI =	8E-01
Total Gastrointestinal Tract HI =	4E-01

Table 9.1nn Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30417
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30417	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	4E-02	NA	4E-04	4E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	1E-02	1E-01
			Arsenic	1.2E-06	NA	4.2E-08	1.3E-06	Arsenic	Skin/Vascular	1E-01	NA	3E-03	1E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-03	NA	1E-03	8E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	1E-03	3E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-01	NA	3E-03	3E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-02	NA	1E-02	6E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-02	NA	5E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-03	NA	6E-05	5E-03
			(Total)	1.2E-06	NC	4.2E-08	1.3E-06	(Total)		7E-01	NC	4E-02	8E-01
Groundwater	Groundwater	Property 30417	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.3E-06	Total Hazard Index Across Soil	8E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.3E-06	Total Hazard Index Across All Media and All Exposure Routes	8E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	4.8E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	1.8E-06

Total CNS HI =	1E-01
Total Lifetime HI =	2E-01
Total Blood HI =	1E-01
Total Skin/Vascular HI =	1E-01
Total Kidney HI =	3E-02
Total Thyroid HI =	3E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1oo Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30448
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30448	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30448	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	1E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	3E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1oo Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30448
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30448	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30448	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-03	NA	3E-04	7E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	7E-03	1E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	1E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1oo Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30448
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30448	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30448	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	3E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		6E-01	NC	7E-02	7E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	7E-01
Total Hazard Index Across All Media and All Exposure Routes	7E-01
Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	7E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Notes:
NA = not available
NC = not calculated

Table 9.1oo Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30448
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30448	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30448	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-03	NA	7E-04	9E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1pp Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30553
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30553	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	7E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-02	NA	4E-03	2E-02
			Arsenic	8.0E-06	NA	9.5E-07	8.9E-06	Arsenic	Skin/Vascular	5E-02	NA	6E-03	6E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-03	NA	2E-03	5E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	7E-02	NA	3E-03	8E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-02	NA	1E-03	4E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	2E-02	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	8E-03	NA	1E-02	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	7E-05	2E-03
			(Total)	8.0E-06	NC	9.5E-07	8.9E-06	(Total)		2E-01	NC	5E-02	3E-01
Groundwater	Groundwater	Property 30553	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	1E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	1E-02	2E-01

Total Risk Across Soil	8.9E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	8.9E-06
Total Hazard Index Across Soil	3E-01
Total Hazard Index Across Groundwater	2E-01
Total Hazard Index Across All Media and All Exposure Routes	4E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	2.0E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	2.9E-05

Total CNS HI =	5E-02
Total Lifetime HI =	4E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	6E-02
Total Kidney HI =	2E-01
Total Thyroid HI =	8E-02
Total Gastrointestinal Tract HI =	4E-02

Table 9.1pp Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30553
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30553	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	6E-03	NA	7E-05	6E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	6E-03	NA	4E-04	6E-03
			Arsenic	8.1E-07	NA	2.8E-08	8.4E-07	Arsenic	Skin/Vascular	2E-02	NA	6E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-03	NA	2E-04	1E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-02	NA	3E-04	3E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	1E-04	1E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-03	NA	2E-03	7E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-03	NA	1E-03	4E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	6E-04	NA	7E-06	6E-04
			(Total)	8.1E-07	NC	2.8E-08	8.4E-07	(Total)		8E-02	NC	5E-03	8E-02
Groundwater	Groundwater	Property 30553	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	7E-02	NA	3E-03	8E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		7E-02	NC	3E-03	8E-02

Total Risk Across Soil	8.4E-07
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	8.4E-07
Total Child Risk Across All Media and All Exposure Routes	2.2E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	3.1E-06

Total Hazard Index Across Soil	8E-02
Total Hazard Index Across Groundwater	8E-02
Total Hazard Index Across All Media and All Exposure Routes	2E-01
Total CNS HI =	1E-02
Total Lifetime HI =	1E-02
Total Blood HI =	7E-03
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	8E-02
Total Thyroid HI =	3E-02
Total Gastrointestinal Tract HI =	1E-02

Notes:
NA = not available
NC = not calculated

Table 9.1pp Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30553
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30553	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	4E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	2E-01	NA	3E-02	2E-01
			Arsenic	1.9E-05	NA	1.6E-06	2.0E-05	Arsenic	Skin/Vascular	5E-01	NA	4E-02	5E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	1E-02	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	7E-01	NA	2E-02	7E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-01	NA	9E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-01	NA	1E-01	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	7E-02	NA	8E-02	2E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-02	NA	4E-04	2E-02
			(Total)	1.9E-05	NC	1.6E-06	2.0E-05	(Total)		2E+00	NC	3E-01	2E+00
Groundwater	Groundwater	Property 30553	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-01	NA	3E-02	4E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		4E-01	NC	3E-02	4E-01

Total Risk Across Soil	2.0E-05
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	2.0E-05
Total Adult Risk Across All Media and All Exposure Routes	8.9E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.9E-05

Total Hazard Index Across Soil	2E+00
Total Hazard Index Across Groundwater	4E-01
Total Hazard Index Across All Media and All Exposure Routes	3E+00
Total CNS HI =	4E-01
Total Lifetime HI =	3E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	5E-01
Total Kidney HI =	5E-01
Total Thyroid HI =	7E-01
Total Gastrointestinal Tract HI =	3E-01

Notes:
NA = not available
NC = not calculated

Table 9.1pp Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30553
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30553	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	6E-04	5E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	5E-02	NA	4E-03	6E-02
			Arsenic	2.2E-06	NA	7.3E-08	2.2E-06	Arsenic	Skin/Vascular	2E-01	NA	6E-03	2E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	3E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	1E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-02	NA	1E-02	7E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	3E-02	NA	1E-02	4E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-03	NA	6E-05	6E-03
			(Total)	2.2E-06	NC	7.3E-08	2.2E-06	(Total)		7E-01	NC	4E-02	8E-01
Groundwater	Groundwater	Property 30553	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-01	NA	8E-03	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	8E-03	1E-01

Total Risk Across Soil	2.2E-06	Total Hazard Index Across Soil	8E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E-01
Total Risk Across All Media and All Exposure Routes	2.2E-06	Total Hazard Index Across All Media and All Exposure Routes	9E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	8.4E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	3.1E-06

Total CNS HI =	1E-01
Total Lifetime HI =	9E-02
Total Blood HI =	6E-02
Total Skin/Vascular HI =	2E-01
Total Kidney HI =	1E-01
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	1E-01

Table 9.1qq Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30577
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30577	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30577	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1qq Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30577
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30577	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30577	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1qq Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30577
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30577	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30577	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1qq Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30577
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30577	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30577	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	0E+00
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1rr Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30651
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30651	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-02	NA	1E-03	3E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	4E-03	2E-02
			Arsenic	1.2E-05	NA	1.5E-06	1.4E-05	Arsenic	Skin/Vascular	8E-02	NA	9E-03	9E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-03	NA	2E-03	4E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	5E-03	NA	7E-04	5E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-02	NA	1E-03	3E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	6E-02	NA	3E-03	7E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	6E-03	NA	6E-03	1E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-02	NA	2E-02	3E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-03	NA	1E-04	3E-03
			(Total)	1.2E-05	NC	1.5E-06	1.4E-05	(Total)		2E-01	NC	4E-02	3E-01
Groundwater	Groundwater	Property 30651	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.4E-05	Total Hazard Index Across Soil	3E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.4E-05	Total Hazard Index Across All Media and All Exposure Routes	3E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	3.1E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	4.4E-05

Total CNS HI =	4E-02
Total Lifetime HI =	5E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	9E-02
Total Kidney HI =	1E-02
Total Thyroid HI =	3E-02
Total Gastrointestinal Tract HI =	7E-02

Table 9.1rr Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30651
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30651	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	1E-04	1E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	5E-03	NA	4E-04	5E-03
			Arsenic	1.2E-06	NA	4.2E-08	1.3E-06	Arsenic	Skin/Vascular	3E-02	NA	9E-04	3E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	9E-04	NA	2E-04	1E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	7E-05	2E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-02	NA	1E-04	1E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-02	NA	3E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-03	NA	6E-04	3E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-03	NA	2E-03	6E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-03	NA	1E-05	1E-03
			(Total)	1.2E-06	NC	4.2E-08	1.3E-06	(Total)		9E-02	NC	4E-03	9E-02
Groundwater	Groundwater	Property 30651	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.3E-06	Total Hazard Index Across Soil	9E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.3E-06	Total Hazard Index Across All Media and All Exposure Routes	9E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	3.4E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	4.7E-06

Total CNS HI =	1E-02
Total Lifetime HI =	1E-02
Total Blood HI =	6E-03
Total Skin/Vascular HI =	3E-02
Total Kidney HI =	3E-03
Total Thyroid HI =	1E-02
Total Gastrointestinal Tract HI =	2E-02

Table 9.1rr Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30651
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30651	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	3E-01	NA	8E-03	3E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	2E-02	2E-01
			Arsenic	2.8E-05	NA	2.4E-06	3.1E-05	Arsenic	Skin/Vascular	7E-01	NA	6E-02	8E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	1E-02	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-02	NA	5E-03	5E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	3E-01	NA	9E-03	3E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	6E-01	NA	2E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	6E-02	NA	4E-02	9E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-01	NA	1E-01	2E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-02	NA	8E-04	3E-02
			(Total)	2.8E-05	NC	2.4E-06	3.1E-05	(Total)		2E+00	NC	3E-01	3E+00
Groundwater	Groundwater	Property 30651	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	3.1E-05
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	3.1E-05
Total Adult Risk Across All Media and All Exposure Routes	1.4E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	4.4E-05

Total Hazard Index Across Soil	3E+00
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	3E+00
Total CNS HI =	4E-01
Total Lifetime HI =	4E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	8E-01
Total Kidney HI =	8E-02
Total Thyroid HI =	3E-01
Total Gastrointestinal Tract HI =	6E-01

Notes:
NA = not available
NC = not calculated

Table 9.1rr Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30651
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30651	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	1E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	5E-02	NA	3E-03	5E-02
			Arsenic	3.3E-06	NA	1.1E-07	3.4E-06	Arsenic	Skin/Vascular	3E-01	NA	9E-03	3E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	9E-03	NA	1E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	7E-04	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	1E-01	NA	1E-03	1E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-01	NA	2E-03	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	5E-03	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-02	NA	2E-02	6E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	9E-03	NA	1E-04	1E-02
			(Total)	3.3E-06	NC	1.1E-07	3.4E-06	(Total)		8E-01	NC	4E-02	8E-01
Groundwater	Groundwater	Property 30651	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	3.4E-06	Total Hazard Index Across Soil	8E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	3.4E-06	Total Hazard Index Across All Media and All Exposure Routes	8E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	1.3E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	4.7E-06

Total CNS HI =	1E-01
Total Lifetime HI =	1E-01
Total Blood HI =	6E-02
Total Skin/Vascular HI =	3E-01
Total Kidney HI =	3E-02
Total Thyroid HI =	1E-01
Total Gastrointestinal Tract HI =	2E-01

Table 9.1ss Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30911
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30911	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	1E-03	3E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	3E-03	1E-02
			Arsenic	1.8E-05	NA	2.1E-06	2.0E-05	Arsenic	Skin/Vascular	1E-01	NA	1E-02	1E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-03	NA	2E-03	6E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-02	NA	2E-03	1E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-02	NA	2E-03	6E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	8E-02	NA	3E-03	8E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	7E-03	NA	7E-03	1E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-02	NA	2E-02	3E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-03	NA	2E-04	5E-03
			(Total)	1.8E-05	NC	2.1E-06	2.0E-05	(Total)		3E-01	NC	5E-02	4E-01
Groundwater	Groundwater	Property 30911	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	2.0E-05	Total Hazard Index Across Soil	4E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	2.0E-05	Total Hazard Index Across All Media and All Exposure Routes	4E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	4.5E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	6.4E-05

Total CNS HI =	4E-02
Total Lifetime HI =	4E-02
Total Blood HI =	2E-02
Total Skin/Vascular HI =	1E-01
Total Kidney HI =	2E-02
Total Thyroid HI =	6E-02
Total Gastrointestinal Tract HI =	8E-02

Table 9.1ss Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30911
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30911	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	9E-03	NA	1E-04	9E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-03	NA	3E-04	4E-03
			Arsenic	1.8E-06	NA	6.1E-08	1.9E-06	Arsenic	Skin/Vascular	4E-02	NA	1E-03	4E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-03	NA	2E-04	2E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-03	NA	2E-04	4E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	3E-04	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-03	NA	7E-04	3E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-03	NA	2E-03	6E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-03	NA	2E-05	2E-03
			(Total)	1.8E-06	NC	6.1E-08	1.9E-06	(Total)		1E-01	NC	5E-03	1E-01
Groundwater	Groundwater	Property 30911	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	1.9E-06	Total Hazard Index Across Soil	1E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	1.9E-06	Total Hazard Index Across All Media and All Exposure Routes	1E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	5.0E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	6.8E-06

Total CNS HI =	1E-02
Total Lifetime HI =	1E-02
Total Blood HI =	6E-03
Total Skin/Vascular HI =	4E-02
Total Kidney HI =	6E-03
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	3E-02

Table 9.1ss Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30911
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30911	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-01	NA	7E-03	2E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	2E-02	1E-01
			Arsenic	4.1E-05	NA	3.5E-06	4.5E-05	Arsenic	Skin/Vascular	1E+00	NA	9E-02	1E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	2E-02	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	1E-02	1E-01
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-01	NA	1E-02	5E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	7E-01	NA	2E-02	7E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	6E-02	NA	4E-02	1E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	1E-01	NA	1E-01	2E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	5E-02	NA	1E-03	5E-02
			(Total)	4.1E-05	NC	3.5E-06	4.5E-05	(Total)		3E+00	NC	3E-01	3E+00
Groundwater	Groundwater	Property 30911	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	4.5E-05	Total Hazard Index Across Soil	3E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	4.5E-05	Total Hazard Index Across All Media and All Exposure Routes	3E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	2.0E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	6.4E-05

Total CNS HI =	3E-01
Total Lifetime HI =	3E-01
Total Blood HI =	2E-01
Total Skin/Vascular HI =	1E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	5E-01
Total Gastrointestinal Tract HI =	7E-01

Table 9.1ss Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30911
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30911	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	8E-02	NA	9E-04	8E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	4E-02	NA	3E-03	4E-02
			Arsenic	4.8E-06	NA	1.6E-07	5.0E-06	Arsenic	Skin/Vascular	4E-01	NA	1E-02	4E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	4E-02	NA	2E-03	4E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-01	NA	3E-03	3E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	6E-03	3E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	4E-02	NA	2E-02	5E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	2E-02	NA	2E-04	2E-02
			(Total)	4.8E-06	NC	1.6E-07	5.0E-06	(Total)		1E+00	NC	5E-02	1E+00
Groundwater	Groundwater	Property 30911	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00

Total Risk Across Soil	5.0E-06	Total Hazard Index Across Soil	1E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	0E+00
Total Risk Across All Media and All Exposure Routes	5.0E-06	Total Hazard Index Across All Media and All Exposure Routes	1E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	1.9E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	6.8E-06

Total CNS HI =	1E-01
Total Lifetime HI =	9E-02
Total Blood HI =	6E-02
Total Skin/Vascular HI =	4E-01
Total Kidney HI =	5E-02
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	3E-01

Table 9.1tt Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30914
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30914	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	2E-02	NA	6E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	3E-02	NA	9E-03	4E-02
			Arsenic	6.6E-06	NA	7.8E-07	7.3E-06	Arsenic	Skin/Vascular	4E-02	NA	5E-03	5E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-03	NA	2E-03	6E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-03	NA	3E-04	2E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	1E-03	3E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-02	NA	2E-03	4E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-03	NA	5E-03	1E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	6E-03	NA	1E-02	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-03	NA	1E-04	4E-03
			(Total)	6.6E-06	NC	7.8E-07	7.3E-06	(Total)		2E-01	NC	3E-02	2E-01
Groundwater	Groundwater	Property 30914	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-02	NA	2E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	3E-01

Total Risk Across Soil	7.3E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	7.3E-06
Total Hazard Index Across Soil	2E-01
Total Hazard Index Across Groundwater	3E-01
Total Hazard Index Across All Media and All Exposure Routes	5E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.7E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	2.4E-05

Total CNS HI =	3E-02
Total Lifetime HI =	6E-02
Total Blood HI =	4E-02
Total Skin/Vascular HI =	5E-02
Total Kidney HI =	3E-01
Total Thyroid HI =	3E-02
Total Gastrointestinal Tract HI =	4E-02

Table 9.1tt Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30914
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30914	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-03	NA	6E-05	5E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-02	NA	9E-04	1E-02
			Arsenic	6.7E-07	NA	2.3E-08	6.9E-07	Arsenic	Skin/Vascular	1E-02	NA	5E-04	2E-02
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-03	NA	2E-04	2E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-04	NA	3E-05	6E-04
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	8E-03	NA	1E-04	9E-03
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-02	NA	2E-04	2E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-03	NA	5E-04	2E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	1E-03	3E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-03	NA	1E-05	1E-03
			(Total)	6.7E-07	NC	2.3E-08	6.9E-07	(Total)		6E-02	NC	3E-03	7E-02
Groundwater	Groundwater	Property 30914	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	5E-04	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	7E-03	1E-01

Total Risk Across Soil	6.9E-07	Total Hazard Index Across Soil	7E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	1E-01
Total Risk Across All Media and All Exposure Routes	6.9E-07	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.8E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.5E-06

Total CNS HI =	8E-03
Total Lifetime HI =	2E-02
Total Blood HI =	1E-02
Total Skin/Vascular HI =	2E-02
Total Kidney HI =	1E-01
Total Thyroid HI =	9E-03
Total Gastrointestinal Tract HI =	2E-02

Table 9.1tt Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30914
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30914	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	4E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	3E-01	NA	6E-02	4E-01
			Arsenic	1.5E-05	NA	1.3E-06	1.7E-05	Arsenic	Skin/Vascular	4E-01	NA	3E-02	4E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	1E-02	5E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-02	NA	2E-03	2E-02
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	6E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	4E-01	NA	1E-02	4E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	5E-02	NA	3E-02	8E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	6E-02	NA	6E-02	1E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-02	NA	9E-04	3E-02
			(Total)	1.5E-05	NC	1.3E-06	1.7E-05	(Total)		2E+00	NC	2E-01	2E+00
Groundwater	Groundwater	Property 30914	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-02	NA	5E-03	6E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		6E-01	NC	7E-02	7E-01

Total Risk Across Soil	1.7E-05
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	1.7E-05
Total Adult Risk Across All Media and All Exposure Routes	7.3E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.4E-05

Total Hazard Index Across Soil	2E+00
Total Hazard Index Across Groundwater	7E-01
Total Hazard Index Across All Media and All Exposure Routes	3E+00
Total CNS HI =	2E-01
Total Lifetime HI =	5E-01
Total Blood HI =	4E-01
Total Skin/Vascular HI =	4E-01
Total Kidney HI =	8E-01
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	4E-01

Notes:
NA = not available
NC = not calculated

Table 9.1tt Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30914
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30914	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	6E-04	5E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	1E-01	NA	8E-03	1E-01
			Arsenic	1.8E-06	NA	6.0E-08	1.8E-06	Arsenic	Skin/Vascular	1E-01	NA	5E-03	1E-01
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	2E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	5E-03	NA	2E-04	6E-03
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	8E-02	NA	9E-04	8E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	1E-01	NA	2E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	2E-02	NA	5E-03	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	9E-03	3E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	1E-02	NA	1E-04	1E-02
			(Total)	1.8E-06	NC	6.0E-08	1.8E-06	(Total)		6E-01	NC	3E-02	6E-01
Groundwater	Groundwater	Property 30914	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-02	NA	1E-03	2E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	1.8E-06
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	1.8E-06
Total Adult Risk Across All Media and All Exposure Routes	6.9E-07
Total Adult and Child Risk Across All Media and All Exposure Routes	2.5E-06

Total Hazard Index Across Soil	6E-01
Total Hazard Index Across Groundwater	2E-01
Total Hazard Index Across All Media and All Exposure Routes	8E-01
Total CNS HI =	7E-02
Total Lifetime HI =	1E-01
Total Blood HI =	1E-01
Total Skin/Vascular HI =	1E-01
Total Kidney HI =	2E-01
Total Thyroid HI =	8E-02
Total Gastrointestinal Tract HI =	1E-01

Notes:
NA = not available
NC = not calculated

Table 9.1uu Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 30965
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30965	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30965	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	6E-02	NA	4E-03	6E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		6E-02	NC	4E-03	6E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	6E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	6E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	6E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1uu Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 30965
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30965	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30965	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	1E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		3E-02	NC	1E-03	3E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	3E-02

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1uu Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 30965
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30965	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30965	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	1E-01	NA	1E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	1E-02	2E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1uu Summary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 30965
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30965	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	NC	NA	NC	0E+00
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	NC	NA	NC	0E+00
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	NC	NA	NC	0E+00
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	NC	NA	NC	0E+00
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	NC	NA	NC	0E+00
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30965	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	3E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		4E-02	NC	3E-03	4E-02

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	0E+00
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	4E-02
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	4E-02

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	0E+00
Total Lifetime HI =	0E+00
Total Blood HI =	0E+00
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	4E-02
Total Thyroid HI =	0E+00
Total Gastrointestinal Tract HI =	0E+00

Table 9.1vv Summary of Receptor Risks and Hazards for COPCs
Adult Residential RME at Property 31016
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 31016	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-02	NA	6E-04	2E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-03	NA	5E-03	1E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	5E-02	NA	2E-03	5E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	3E-02	NA	1E-03	3E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	1E-02	NA	1E-02	2E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-03	NA	8E-03	1E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-04	NA	1E-05	3E-04
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	3E-02	1E-01
Groundwater	Groundwater	Property 31016	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-02	NA	6E-03	9E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	2E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		3E-01	NC	3E-02	3E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	1E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	3E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	5E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	3E-02
Total Lifetime HI =	1E-02
Total Blood HI =	3E-04
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	3E-01
Total Thyroid HI =	5E-02
Total Gastrointestinal Tract HI =	3E-02

Table 9.1vv Summary of Receptor Risks and Hazards for COPCs
Adult Residential CTE at Property 31016
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 31016	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-03	NA	6E-05	5E-03
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-03	NA	5E-04	3E-03
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-02	NA	2E-04	2E-02
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	9E-03	NA	1E-04	9E-03
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-03	NA	1E-03	4E-03
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-03	NA	8E-04	3E-03
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	9E-05	NA	1E-06	1E-04
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		4E-02	NC	3E-03	4E-02
Groundwater	Groundwater	Property 31016	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	4E-02	NA	2E-03	4E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	7E-03	1E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E-01	NC	9E-03	2E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	4E-02
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	2E-01

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	1E-02
Total Lifetime HI =	3E-03
Total Blood HI =	1E-04
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	2E-02
Total Gastrointestinal Tract HI =	9E-03

Table 9.1vv Summary of Receptor Risks and Hazards for COPCs
Child Residential RME at Property 31016
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 31016	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	1E-01	NA	4E-03	1E-01
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	8E-02	NA	3E-02	1E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	4E-01	NA	1E-02	5E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	2E-01	NA	7E-03	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	9E-02	NA	6E-02	2E-01
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	5E-02	NA	5E-02	1E-01
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	3E-03	NA	7E-05	3E-03
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		1E+00	NC	2E-01	1E+00
Groundwater	Groundwater	Property 31016	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	2E-01	NA	2E-02	2E-01
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	6E-01	NA	7E-02	6E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		8E-01	NC	9E-02	9E-01

Total Risk Across Soil	0.0E+00
Total Risk Across Groundwater	0.0E+00
Total Risk Across All Media and All Exposure Routes	0.0E+00

Total Hazard Index Across Soil	1E+00
Total Hazard Index Across Groundwater	9E-01
Total Hazard Index Across All Media and All Exposure Routes	2E+00

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	3E-01
Total Lifetime HI =	1E-01
Total Blood HI =	3E-03
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	1E+00
Total Thyroid HI =	5E-01
Total Gastrointestinal Tract HI =	2E-01

Table 9.1vvSummary of Receptor Risks and Hazards for COPCs
Child Residential CTE at Property 31016
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 31016	Aluminum	NC	NA	NC	0.0E+00	Aluminum	CNS	5E-02	NA	5E-04	5E-02
			Antimony	NC	NA	NC	0.0E+00	Antimony	Lifetime/Blood	NC	NA	NC	0E+00
			Arsenic	NC	NA	NC	0.0E+00	Arsenic	Skin/Vascular	NC	NA	NC	0E+00
			Barium	NC	NA	NC	0.0E+00	Barium	Kidney	3E-02	NA	4E-03	3E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	NC	NA	NC	0E+00
			Cobalt	NC	NA	NC	0.0E+00	Cobalt	Thyroid	2E-01	NA	2E-03	2E-01
			Iron	NC	NA	NC	0.0E+00	Iron	Gastrointestinal Tract	9E-02	NA	1E-03	9E-02
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			Manganese	NC	NA	NC	0.0E+00	Manganese	CNS	3E-02	NA	9E-03	4E-02
			Vanadium	NC	NA	NC	0.0E+00	Vanadium	Lifetime	2E-02	NA	7E-03	2E-02
			Zinc	NC	NA	NC	0.0E+00	Zinc	Blood	9E-04	NA	1E-05	9E-04
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		4E-01	NC	2E-02	4E-01
Groundwater	Groundwater	Property 31016	Barium	NC	NA	NC	0.0E+00	Barium	Kidney	5E-02	NA	4E-03	6E-02
			Cadmium	NC	NA	NC	0.0E+00	Cadmium	Kidney	1E-01	NA	2E-02	2E-01
			Lead	NC	NA	NC	0.0E+00	Lead	NA	NC	NA	NC	0E+00
			(Total)	0.0E+00	NC	0.0E+00	0.0E+00	(Total)		2E-01	NC	2E-02	2E-01

Total Risk Across Soil	0.0E+00	Total Hazard Index Across Soil	4E-01
Total Risk Across Groundwater	0.0E+00	Total Hazard Index Across Groundwater	2E-01
Total Risk Across All Media and All Exposure Routes	0.0E+00	Total Hazard Index Across All Media and All Exposure Routes	6E-01

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	0.0E+00
Total Adult and Child Risk Across All Media and All Exposure Routes	0.0E+00

Total CNS HI =	9E-02
Total Lifetime HI =	2E-02
Total Blood HI =	9E-04
Total Skin/Vascular HI =	0E+00
Total Kidney HI =	2E-01
Total Thyroid HI =	2E-01
Total Gastrointestinal Tract HI =	9E-02

Table 10.1a Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 8
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 8	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 8	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1a Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 8
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 8	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 8	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1a Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 8
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 8	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 8	None					None					
			(Total)					(Total)					

Total Risk Across Soil	
Total Risk Across Groundwater	
Total Risk Across All Media and All Exposure Routes	

Total Hazard Index Across Soil	
Total Hazard Index Across Groundwater	
Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1a Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 8
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 8	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 8	None					None					
			(Total)										

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1b Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 69
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 69	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 69	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1b Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 69
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 69	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 69	None					None					
								(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1b Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 69
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 69	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 69	None					None					
			(Total)										

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1b Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 69
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 69	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 69	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1c Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 438
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 438	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 438	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1c Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 438
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 438	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 438	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1c Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 438
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 438	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 438	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1c Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 438
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 438	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 438	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1d Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 486
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 486	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 486	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1d Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 486
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 486	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 486	None					None					
			(Total)					(Total)					
						Total Risk Across Soil						Total Hazard Index Across Soil	
						Total Risk Across Groundwater						Total Hazard Index Across Groundwater	
						Total Risk Across All Media and All Exposure Routes						Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1d Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 486
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 486	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 486	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1d Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 486
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 486	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 486	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1e Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 1612
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1612	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1612	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1e Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 1612
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1612	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1612	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1e Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 1612
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1612	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1612	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1e Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 1612
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1612	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1612	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1f Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 1643
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1643	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1643	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1f Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 1643
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1643	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1643	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1f Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 1643
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1643	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1643	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1f Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 1643
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1643	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1643	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1g Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 1653
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1653	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1653	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1g Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 1653
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1653	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1653	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1g Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 1653
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1653	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1653	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1g Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 1653
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 1653	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 1653	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1h Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 5003
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5003	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5003	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1h Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 5003
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5003	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5003	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1h Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 5003
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5003	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5003	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1h Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 5003
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5003	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5003	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1i Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 5007
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5007	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5007	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1i Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 5007
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5007	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5007	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1i Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 5007
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5007	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5007	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1i Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 5007
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5007	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5007	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1j Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 5008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5008	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5008	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1j Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 5008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5008	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5008	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1j Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 5008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5008	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5008	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1j Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 5008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5008	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5008	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1k Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 5012
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5012	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5012	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1k Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 5012
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5012	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5012	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1k Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 5012
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5012	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5012	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1k Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 5012
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5012	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5012	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1l Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 5013
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5013	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5013	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1l Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 5013
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5013	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5013	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1l Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 5013
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5013	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5013	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1l Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 5013
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5013	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5013	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1m Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 5014
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5014	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5014	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1m Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 5014
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5014	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5014	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1m Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 5014
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5014	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5014	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1m Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 5014
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 5014	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 5014	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1n Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20008	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20008	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1n Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20008	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20008	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1n Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20008	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20008	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1n Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20008
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20008	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20008	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1o Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20027
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20027	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20027	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1o Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20027
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20027	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20027	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1o Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20027
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20027	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20027	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1o Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20027
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20027	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20027	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Receptor Risk

Table 10.1p Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20028
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20028	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20028	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1p Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20028
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20028	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20028	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1p Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20028
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20028	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20028	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1p Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20028
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20028	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20028	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1q Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20070
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20070	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20070	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1q Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20070
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20070	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20070	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1q Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20070
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20070	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20070	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1q Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20070
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20070	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20070	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1r Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20108
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20108	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20108	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1r Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20108
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20108	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20108	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1r Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20108
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20108	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20108	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1r Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20108
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20108	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20108	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1s Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20171
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20171	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20171	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1s Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20171
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20171	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20171	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1s Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20171
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20171	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20171	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1s Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20171
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20171	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20171	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1t Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20173
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20173	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20173	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1t Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20173
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20173	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20173	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1t Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20173
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20173	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20173	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1t Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20173
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20173	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20173	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1u Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20187
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20187	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20187	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1u Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20187
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20187	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20187	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1u Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20187
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20187	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20187	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1u Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20187
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20187	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20187	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1v Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20331
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20331	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20331	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1v Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20331
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20331	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20331	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1v Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20331
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20331	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20331	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1v Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20331
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20331	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20331	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1w Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20349
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20349	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20349	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1w Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20349
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20349	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20349	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1w Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20349
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20349	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20349	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1w Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20349
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20349	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20349	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1x Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20397
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20397	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20397	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1x Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20397
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20397	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20397	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1x Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20397
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20397	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20397	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1x Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20397
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20397	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20397	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1y Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20428
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20428	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20428	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1y Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20428
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20428	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20428	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1y Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20428
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20428	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20428	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1y Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20428
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20428	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20428	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1z Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20437
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20437	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20437	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1z Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20437
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20437	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20437	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1z Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20437
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20437	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20437	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1z Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20437
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20437	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20437	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1aa Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20758
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20758	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20758	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1aa Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20758
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20758	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20758	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1aa Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20758
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20758	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20758	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1aa Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20758
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20758	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20758	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1bb Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20767
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20767	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20767	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1bb Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20767
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20767	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20767	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1bb Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20767
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20767	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20767	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1bb Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20767
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20767	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20767	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1cc Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 20918
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20918	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20918	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1cc Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 20918
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20918	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20918	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1cc Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 20918
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20918	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20918	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1cc Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 20918
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 20918	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 20918	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1dd Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 23264
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23264	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23264	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1dd Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 23264
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23264	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23264	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1dd Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 23264
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23264	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23264	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1dd Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 23264
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23264	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23264	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ee Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 23378
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23378	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23378	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1ee Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 23378
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23378	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23378	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ee Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 23378
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23378	None					Cobalt	Thyroid	1E+00	NA	4E-02	2E+00
			(Total)					(Total)		1E+00	NC	4E-02	2E+00
Groundwater	Groundwater	Property 23378	None					None					
			(Total)					(Total)		0E+00	NC	NC	0E+00

Total Risk Across Soil	
Total Risk Across Groundwater	
Total Risk Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Total Hazard Index Across Soil	2E+00
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	2E+00
Total Thyroid HI =	2E+00

Notes:
NA = not available
NC = not calculated

Table 10.1ee Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 23378
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23378	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23378	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ff Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 23575
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23575	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23575	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1ff Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 23575
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23575	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23575	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ff Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 23575
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23575	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23575	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ff Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 23575
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 23575	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 23575	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1gg Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30079
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30079	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30079	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1gg Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30079
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30079	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30079	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1gg Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30079
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30079	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30079	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1gg Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30079
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30079	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30079	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1hh Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30126
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30126	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30126	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1hh Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30126
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30126	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30126	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1hh Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30126
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30126	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30126	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1hh Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30126
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30126	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30126	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ii Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30172
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30172	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30172	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1ii Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30172
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30172	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30172	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ii Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30172
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30172	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30172	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ii Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30172
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30172	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30172	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1jj Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30177
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30177	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30177	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1jj Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30177
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30177	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30177	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1jj Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30177
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30177	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30177	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1jj Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30177
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30177	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30177	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1kk Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30182
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30182	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30182	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1kk Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30182
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30182	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30182	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1kk Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30182
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30182	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30182	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1kk Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30182
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30182	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30182	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ll Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30271
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30271	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30271	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1ll Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30271
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30271	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30271	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ll Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30271
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30271	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30271	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ll Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30271
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30271	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30271	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1mm Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30364
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30364	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30364	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1mm Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30364
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30364	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30364	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1mm Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30364
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30364	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30364	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1mm Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30364
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30364	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30364	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1nn Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30417
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30417	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30417	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1nn Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30417
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30417	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30417	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1nn Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30417
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30417	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30417	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1nn Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30417
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30417	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30417	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1oo Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30448
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30448	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30448	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1oo Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30448
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30448	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30448	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1oo Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30448
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30448	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30448	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1oo Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30448
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30448	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30448	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1pp Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30553
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30553	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30553	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1pp Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30553
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30553	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30553	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1pp Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30553
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30553	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30553	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1pp Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30553
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30553	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30553	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1qq Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30577
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30577	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30577	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1qq Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30577
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30577	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30577	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1qq Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30577
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30577	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30577	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1qq Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30577
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30577	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30577	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1rr Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30651
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30651	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30651	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1rr Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30651
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30651	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30651	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1rr Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30651
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30651	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30651	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1rr Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30651
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30651	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30651	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ss Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30911
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30911	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30911	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1ss Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30911
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30911	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30911	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1ss Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30911
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30911	None					None					
			(Total)					(Total)		0E+00	NC	0E+00	0E+00
Groundwater	Groundwater	Property 30911	None					None					
			(Total)					(Total)		0E+00	NC	NC	0E+00

Total Risk Across Soil	
Total Risk Across Groundwater	
Total Risk Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Total Hazard Index Across Soil	0E+00
Total Hazard Index Across Groundwater	0E+00
Total Hazard Index Across All Media and All Exposure Routes	0E+00

Notes:
NA = not available
NC = not calculated

Table 10.1ss Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30911
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30911	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30911	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1tt Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30914
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30914	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30914	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1tt Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30914
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30914	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30914	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1tt Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30914
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30914	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30914	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1tt Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30914
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30914	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30914	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1uu Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 30965
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30965	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30965	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1uu Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 30965
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30965	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30965	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1uu Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 30965
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30965	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30965	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1uu Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 30965
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 30965	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 30965	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1vv Risk Assessment Summary (Chemicals of Concern)
Adult Residential RME at Property 31016
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 31016	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 31016	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	

Notes:
NA = not available
NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Table 10.1vv Risk Assessment Summary (Chemicals of Concern)
Adult Residential CTE at Property 31016
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 31016	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 31016	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Child Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1vv Risk Assessment Summary (Chemicals of Concern)
Child Residential RME at Property 31016
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 31016	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 31016	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Table 10.1vv Risk Assessment Summary (Chemicals of Concern)
Child Residential CTE at Property 31016
WASHINGTON COUNTY LEAD DISTRICT RI/FS

Scenario Timeframe: Current/Future
Receptor Population: Residential
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Soil	Property 31016	None					None					
			(Total)					(Total)					
Groundwater	Groundwater	Property 31016	None					None					
			(Total)					(Total)					

Total Risk Across Soil		Total Hazard Index Across Soil	
Total Risk Across Groundwater		Total Hazard Index Across Groundwater	
Total Risk Across All Media and All Exposure Routes		Total Hazard Index Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes			
Total Adult and Child Risk Across All Media and All Exposure Routes			

Notes:
NA = not available
NC = not calculated

Appendix I

IEUBK Model Results for Residential Exposures

LEAD MODEL FOR WINDOWS Version 1.1

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/22/09
Site Name: Washington County Lead District
Operable Unit: Property 8
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 1.200 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 2400.500 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	3415.000	2400.500
1-2	3415.000	2400.500
2-3	3415.000	2400.500
3-4	3415.000	2400.500
4-5	3415.000	2400.500
5-6	3415.000	2400.500
6-7	3415.000	2400.500

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

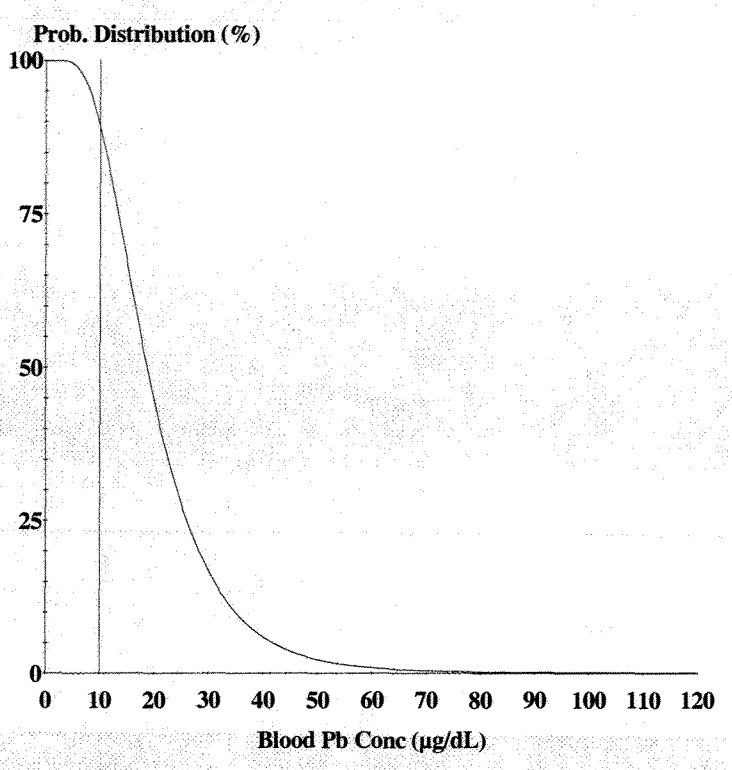
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.694	0.000	0.074
1-2	0.034	0.563	0.000	0.172
2-3	0.062	0.646	0.000	0.189
3-4	0.067	0.651	0.000	0.203
4-5	0.067	0.705	0.000	0.239
5-6	0.093	0.781	0.000	0.265
6-7	0.093	0.871	0.000	0.278

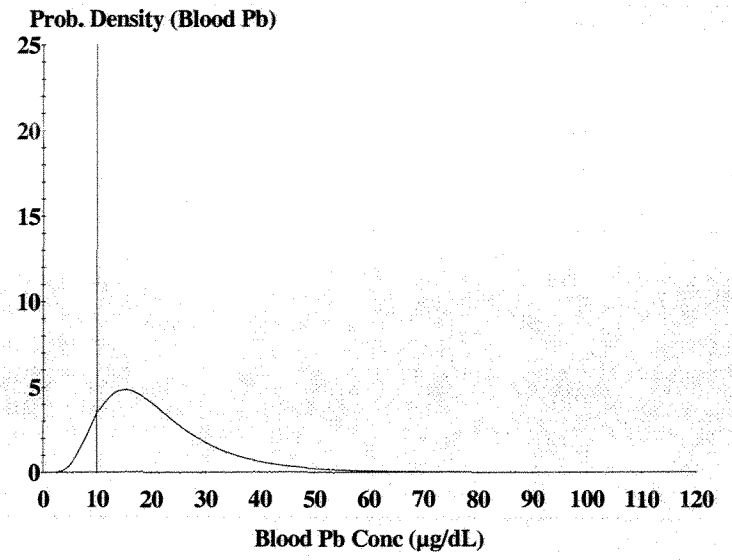
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	40.198	40.987	20.7
1-2	59.754	60.524	23.8
2-3	63.096	63.993	22.7
3-4	66.355	67.276	22.3
4-5	55.660	56.670	19.2
5-6	52.773	53.912	16.6
6-7	51.335	52.577	14.8



Cutoff = 10.000 µg/dl
Geo Mean = 19.565
GSD = 1.600
% Above = 92.336

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 8



Cutoff = 10.000 µg/dl
Geo Mean = 19.565
GSD = 1.600
% Above = 92.336
% Below = 7.664

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 8

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/22/09
Site Name: Washington County Lead District
Operable Unit: Property 69
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 8.800 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 300.500 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	415.000	300.500
1-2	415.000	300.500
2-3	415.000	300.500
3-4	415.000	300.500
4-5	415.000	300.500
5-6	415.000	300.500
6-7	415.000	300.500

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

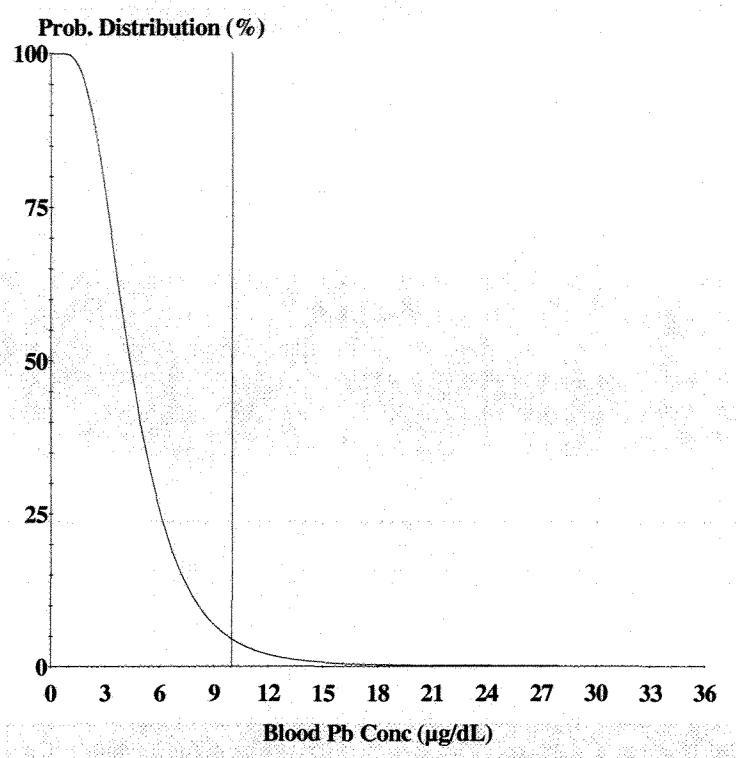
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.018	0.000	0.793
1-2	0.034	0.865	0.000	1.941
2-3	0.062	0.955	0.000	2.052
3-4	0.067	0.928	0.000	2.122
4-5	0.067	0.912	0.000	2.265
5-6	0.093	0.969	0.000	2.413
6-7	0.093	1.056	0.000	2.469

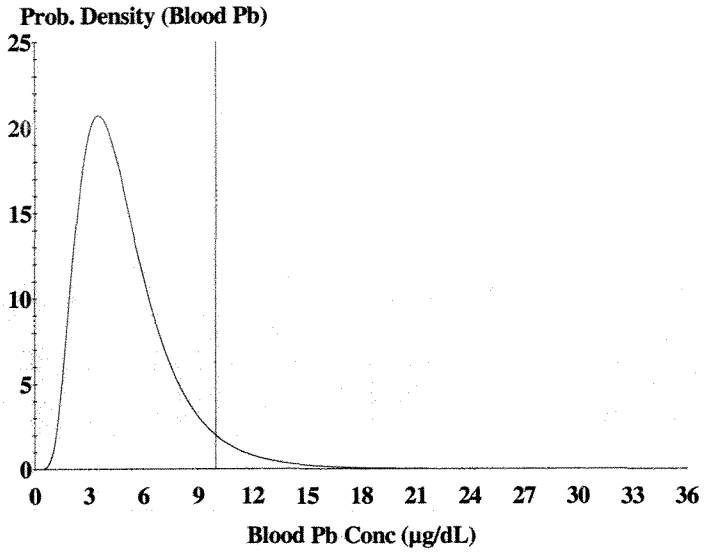
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	7.266	9.098	4.9
1-2	11.300	14.140	5.8
2-3	11.485	14.553	5.4
3-4	11.655	14.772	5.2
4-5	8.878	12.122	4.3
5-6	8.075	11.551	3.7
6-7	7.671	11.289	3.3



Cutoff = 10.000 µg/dl
Geo Mean = 4.570
GSD = 1.600
% Above = 4.787

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 69



Cutoff = 10.000 µg/dl
Geo Mean = 4.570
GSD = 1.600
% Above = 4.787
% Below = 95.213

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 69

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/22/09
Site Name: Washington County Lead District
Operable Unit: Property 438
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 0.500 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 307.500 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	425.000	307.500
1-2	425.000	307.500
2-3	425.000	307.500
3-4	425.000	307.500
4-5	425.000	307.500
5-6	425.000	307.500
6-7	425.000	307.500

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

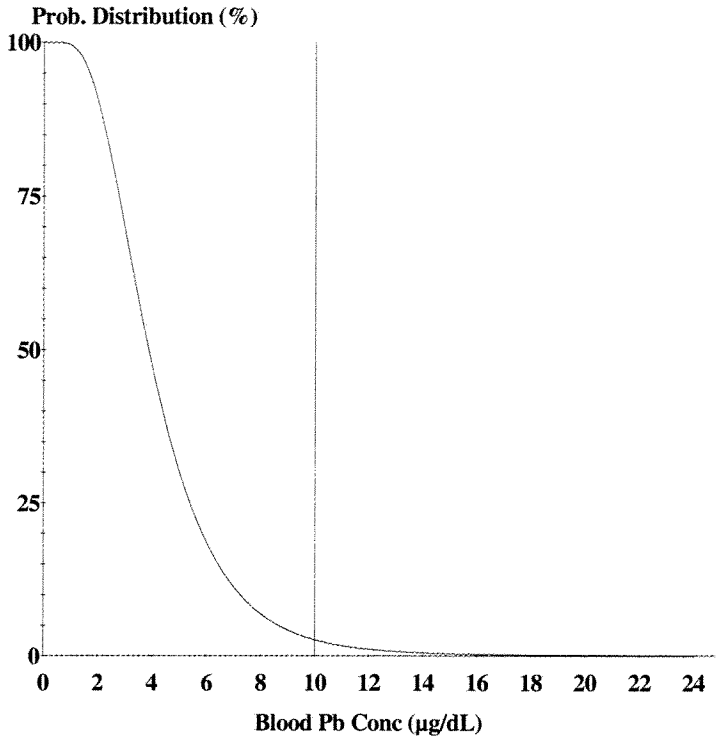
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.024	0.000	0.045
1-2	0.034	0.876	0.000	0.112
2-3	0.062	0.966	0.000	0.118
3-4	0.067	0.938	0.000	0.122
4-5	0.067	0.922	0.000	0.130
5-6	0.093	0.979	0.000	0.138
6-7	0.093	1.066	0.000	0.142

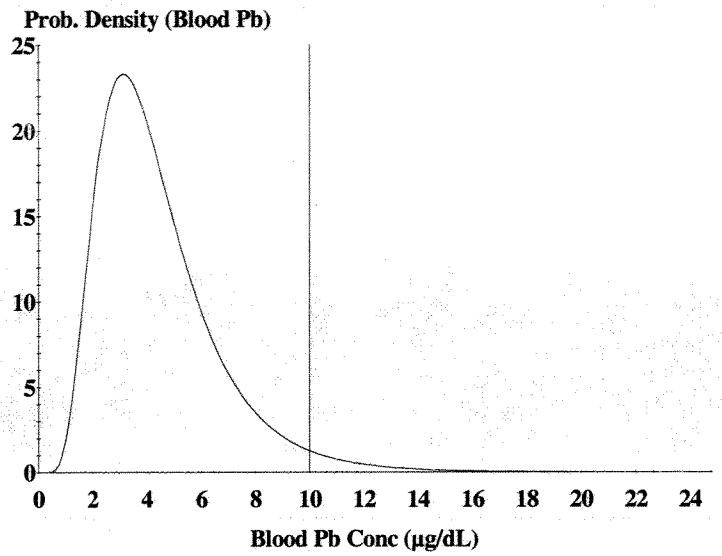
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	7.484	8.574	4.6
1-2	11.716	12.738	5.3
2-3	11.894	13.040	4.9
3-4	12.056	13.183	4.6
4-5	9.182	10.300	3.7
5-6	8.348	9.559	3.1
6-7	7.926	9.227	2.7



Cutoff = 10.000 µg/dl
Geo Mean = 4.059
GSD = 1.600
% Above = 2.753

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 438



Cutoff = 10.000 µg/dl
Geo Mean = 4.059
GSD = 1.600
% Above = 2.753
% Below = 97.247

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 438

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/22/09
Site Name: Washington County Lead District
Operable Unit: Property 486
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 649.800 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	914.000	649.800
1-2	914.000	649.800
2-3	914.000	649.800
3-4	914.000	649.800
4-5	914.000	649.800
5-6	914.000	649.800
6-7	914.000	649.800

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

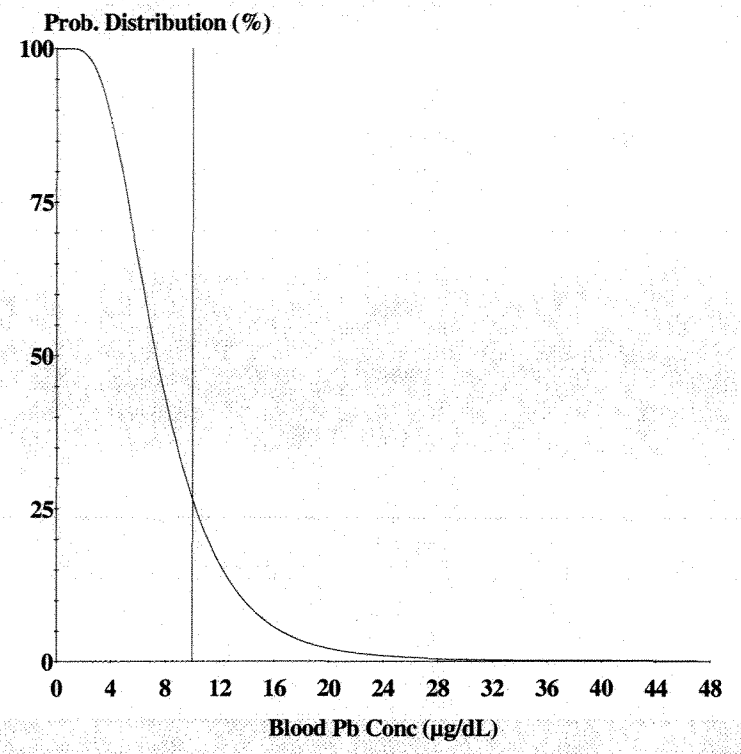
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.939	0.000	0.332
1-2	0.034	0.789	0.000	0.805
2-3	0.062	0.881	0.000	0.860
3-4	0.067	0.864	0.000	0.898
4-5	0.067	0.871	0.000	0.982
5-6	0.093	0.934	0.000	1.057
6-7	0.093	1.022	0.000	1.087

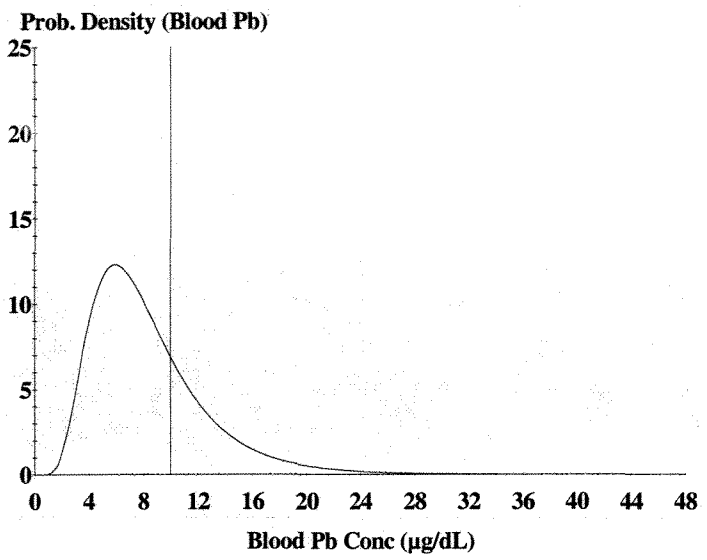
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	14.631	15.923	8.4
1-2	22.504	24.132	9.8
2-3	23.130	24.932	9.2
3-4	23.701	25.531	8.8
4-5	18.501	20.420	7.3
5-6	16.985	19.069	6.1
6-7	16.216	18.418	5.3



Cutoff = 10.000 µg/dl
Geo Mean = 7.696
GSD = 1.600
% Above = 28.865

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 486



Cutoff = 10.000 µg/dl
Geo Mean = 7.696
GSD = 1.600
% Above = 28.865
% Below = 71.135

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 486

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/22/09
Site Name: Washington County Lead District
Operable Unit: Property 1612
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 0.500 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 184.300 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	249.000	184.300
1-2	249.000	184.300
2-3	249.000	184.300
3-4	249.000	184.300
4-5	249.000	184.300
5-6	249.000	184.300
6-7	249.000	184.300

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

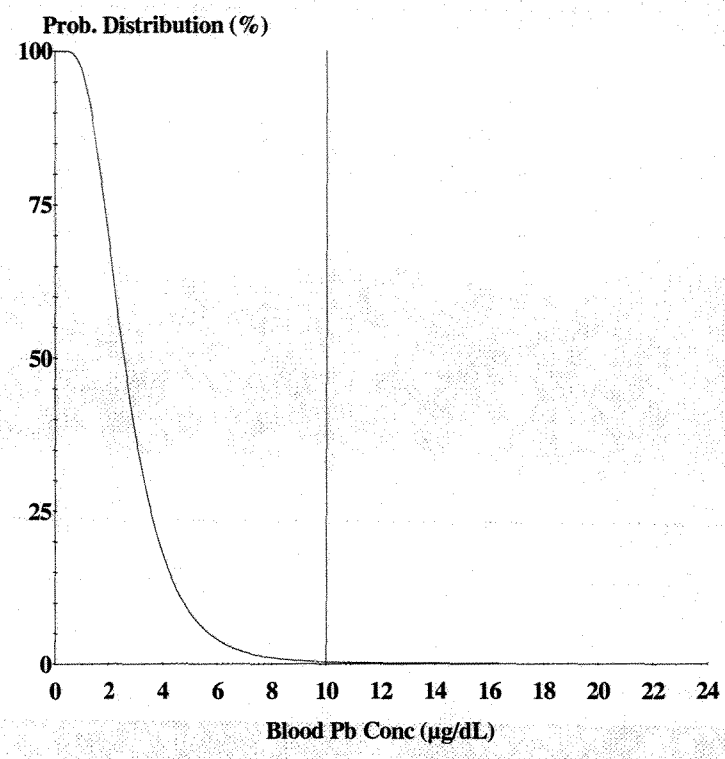
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.059	0.000	0.047
1-2	0.034	0.912	0.000	0.116
2-3	0.062	1.000	0.000	0.122
3-4	0.067	0.967	0.000	0.126
4-5	0.067	0.940	0.000	0.133
5-6	0.093	0.995	0.000	0.141
6-7	0.093	1.081	0.000	0.144

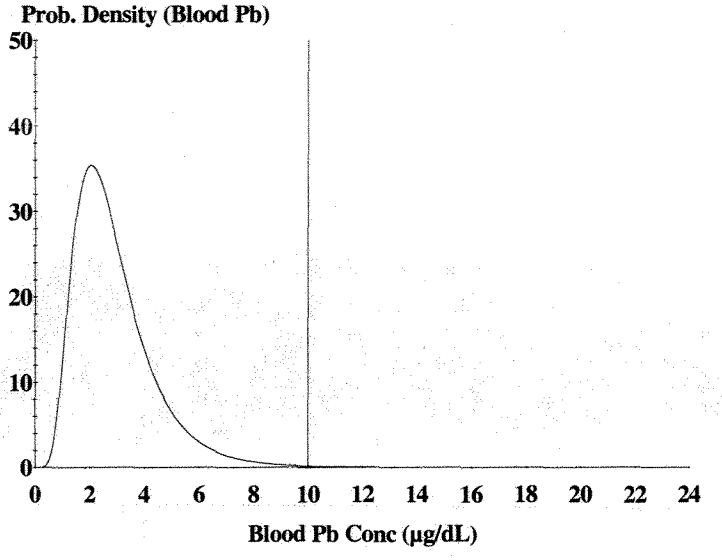
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	4.582	5.709	3.1
1-2	7.222	8.284	3.4
2-3	7.293	8.477	3.2
3-4	7.359	8.518	3.0
4-5	5.547	6.687	2.4
5-6	5.024	6.253	2.0
6-7	4.761	6.078	1.8



Cutoff = 10.000 µg/dl
Geo Mean = 2.672
GSD = 1.600
% Above = 0.249

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 1612



Cutoff = 10.000 µg/dl
Geo Mean = 2.672
GSD = 1.600
% Above = 0.249
% Below = 99.751

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 1612

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 1643
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 182.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	246.000	182.200
1-2	246.000	182.200
2-3	246.000	182.200
3-4	246.000	182.200
4-5	246.000	182.200
5-6	246.000	182.200
6-7	246.000	182.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

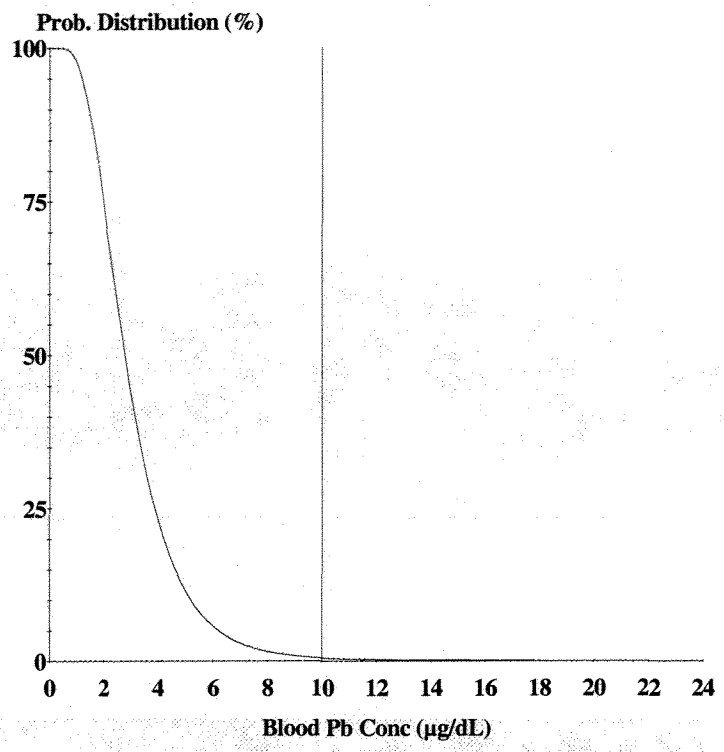
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.056	0.000	0.374
1-2	0.034	0.906	0.000	0.925
2-3	0.062	0.995	0.000	0.971
3-4	0.067	0.962	0.000	1.000
4-5	0.067	0.936	0.000	1.056
5-6	0.093	0.991	0.000	1.121
6-7	0.093	1.076	0.000	1.144

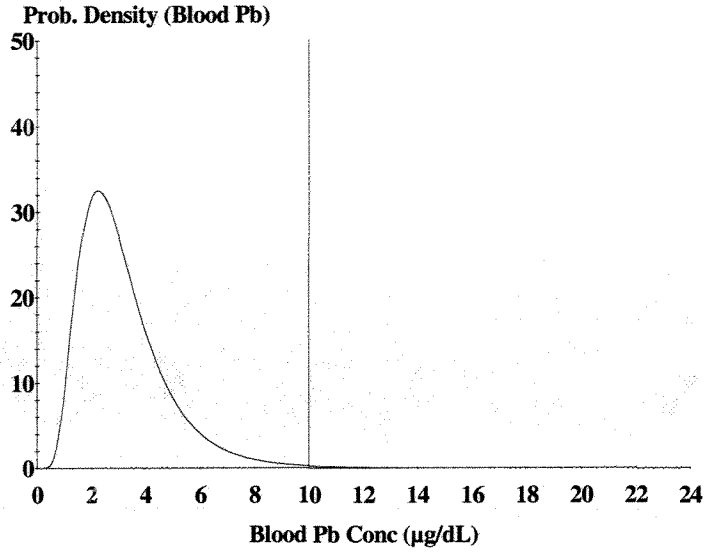
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	4.515	5.966	3.2
1-2	7.094	8.959	3.7
2-3	7.168	9.196	3.4
3-4	7.237	9.266	3.3
4-5	5.457	7.516	2.7
5-6	4.944	7.148	2.3
6-7	4.685	6.999	2.0



Cutoff = 10.000 µg/dl
Geo Mean = 2.913
GSD = 1.600
% Above = 0.434

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 1643



Cutoff = 10.000 µg/dl
Geo Mean = 2.913
GSD = 1.600
% Above = 0.434
% Below = 99.566

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 1643

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 1653
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 28.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 460.800 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	644.000	460.800
1-2	644.000	460.800
2-3	644.000	460.800
3-4	644.000	460.800
4-5	644.000	460.800
5-6	644.000	460.800
6-7	644.000	460.800

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

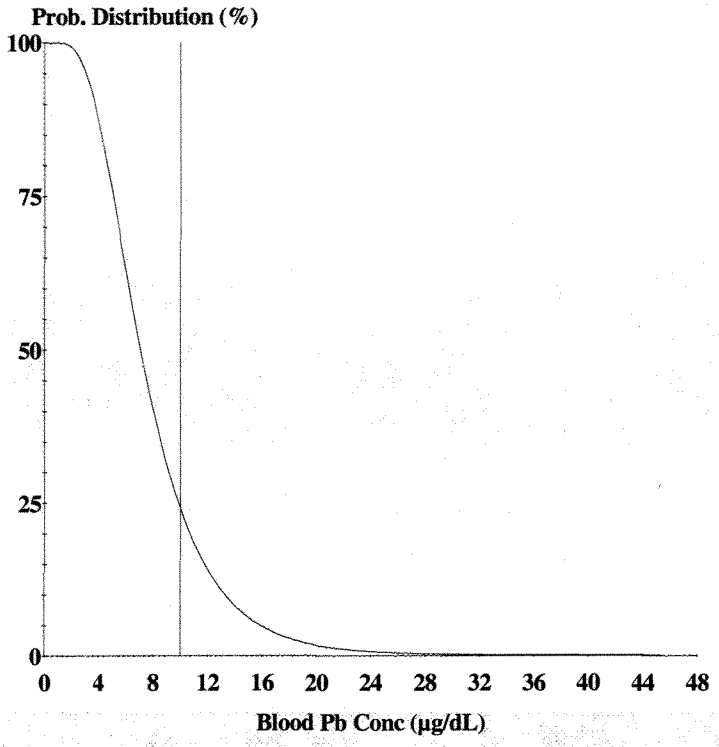
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.961	0.000	2.382
1-2	0.034	0.799	0.000	5.710
2-3	0.062	0.890	0.000	6.086
3-4	0.067	0.872	0.000	6.345
4-5	0.067	0.869	0.000	6.860
5-6	0.093	0.928	0.000	7.352
6-7	0.093	1.015	0.000	7.550

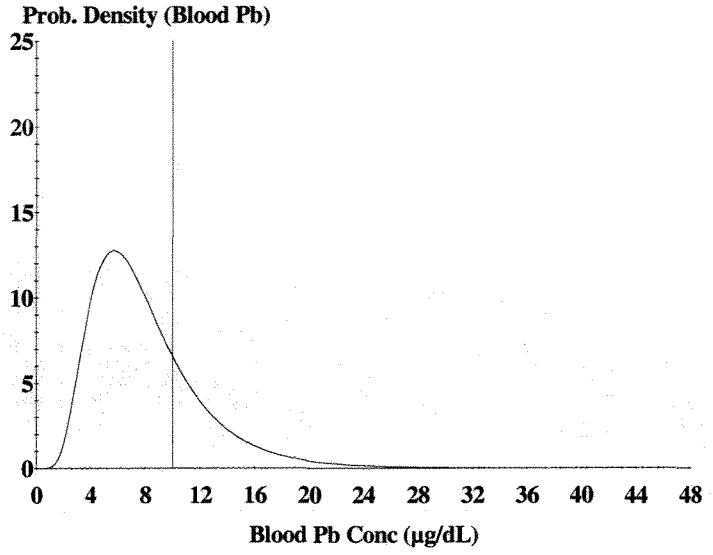
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	10.587	13.951	7.4
1-2	16.122	22.666	9.1
2-3	16.523	23.562	8.7
3-4	16.901	24.185	8.3
4-5	13.043	20.839	7.2
5-6	11.930	20.303	6.3
6-7	11.375	20.034	5.7



Cutoff = 10.000 µg/dl
Geo Mean = 7.421
GSD = 1.600
% Above = 26.283

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 1653



Cutoff = 10.000 µg/dl
Geo Mean = 7.421
GSD = 1.600
% Above = 26.283
% Below = 73.717

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 1653

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	8582.000	6017.400
1-2	8582.000	6017.400
2-3	8582.000	6017.400
3-4	8582.000	6017.400
4-5	8582.000	6017.400
5-6	8582.000	6017.400
6-7	8582.000	6017.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.499	0.000	0.177
1-2	0.034	0.401	0.000	0.409
2-3	0.062	0.463	0.000	0.452
3-4	0.067	0.471	0.000	0.489
4-5	0.067	0.531	0.000	0.599
5-6	0.093	0.603	0.000	0.683
6-7	0.093	0.685	0.000	0.728

Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	72.561	73.258	35.5
1-2	106.656	107.499	40.6
2-3	113.390	114.367	38.9
3-4	120.400	121.426	38.6
4-5	105.249	106.446	34.3
5-6	102.402	103.782	30.6
6-7	101.360	102.866	27.9

Environmental exposures associated with blood lead levels above 30 µg/dl are above
the range of values that have been used in the calibration and empirical validation of
this model. (Zaragoza, L. and Hogan, K. 1998. The Integrated Exposure Uptake
Biokinetic Model for Lead In Children: Independent Validation and Verification.

Environmental Health Perspectives 106 (supplement 6). p. 1555)

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 5003
Run Mode: Research

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

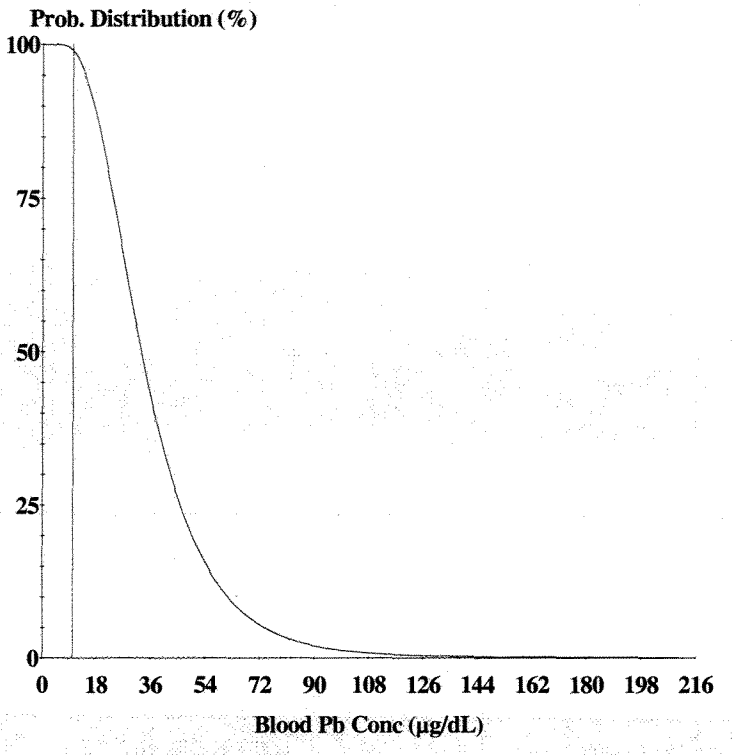
Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 6017.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

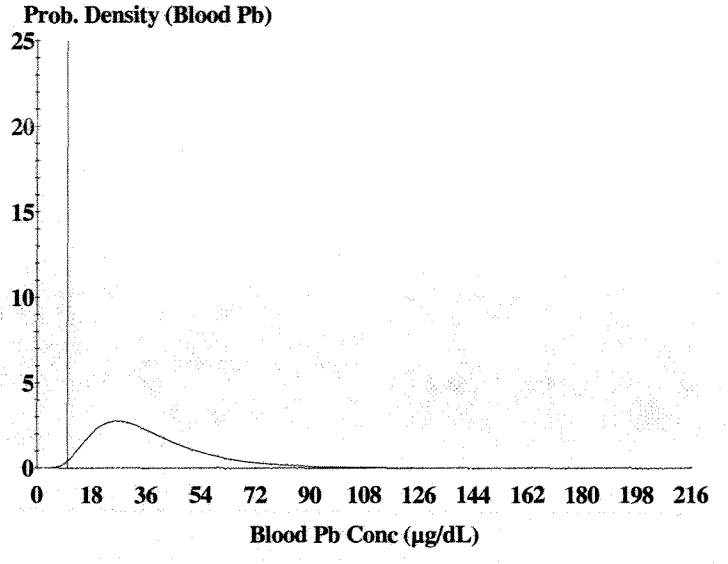


Cutoff = 10.000 µg/dl
Geo Mean = 34.387
GSD = 1.600
% Above = 99.570

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5003

Environmental exposures associated with blood lead levels above 30 µg/dl are above the range of values that have been used in the calibration and empirical validation of this model. (Zaragoza, L. and Hogan, K. 1998. The Integrated Exposure Uptake Biokinetic Model for Lead In Children: Independent Validation and Verification. Environmental Health Perspectives 106 (supplement 6). p. 1555)



Cutoff = 10.000 µg/dl
Geo Mean = 34.387
GSD = 1.600
% Above = 99.570
% Below = 0.430

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5003

Environmental exposures associated with blood lead levels above 30 µg/dl are above the range of values that have been used in the calibration and empirical validation of this model. (Zaragoza, L. and Hogan, K. 1998. The Integrated Exposure Uptake Biokinetic Model for Lead In Children: Independent Validation and Verification. Environmental Health Perspectives 106 (supplement 6). p. 1555)

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 5007
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 2.200 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 453.100 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	633.000	453.100
1-2	633.000	453.100
2-3	633.000	453.100
3-4	633.000	453.100
4-5	633.000	453.100
5-6	633.000	453.100
6-7	633.000	453.100

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

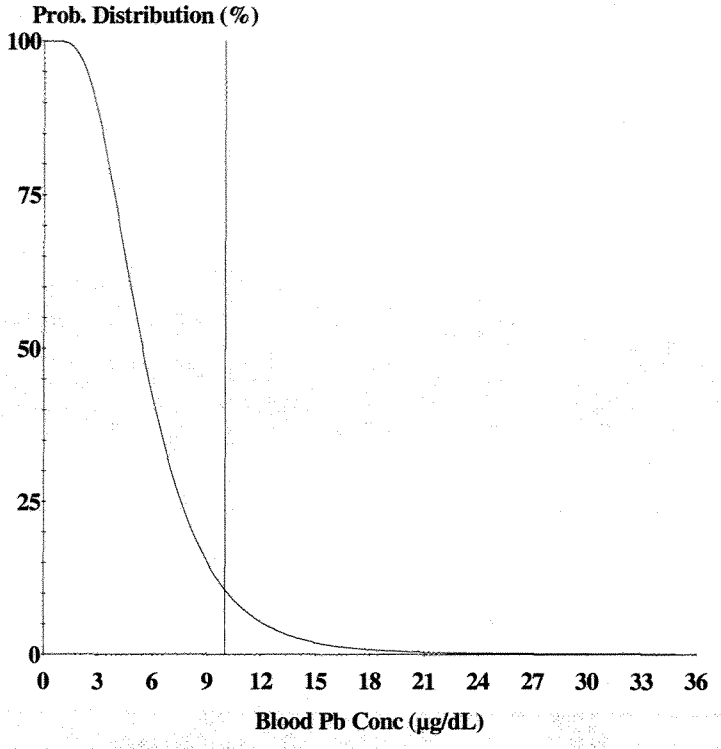
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.985	0.000	0.192
1-2	0.034	0.835	0.000	0.469
2-3	0.062	0.927	0.000	0.498
3-4	0.067	0.904	0.000	0.517
4-5	0.067	0.899	0.000	0.558
5-6	0.093	0.959	0.000	0.597
6-7	0.093	1.046	0.000	0.612

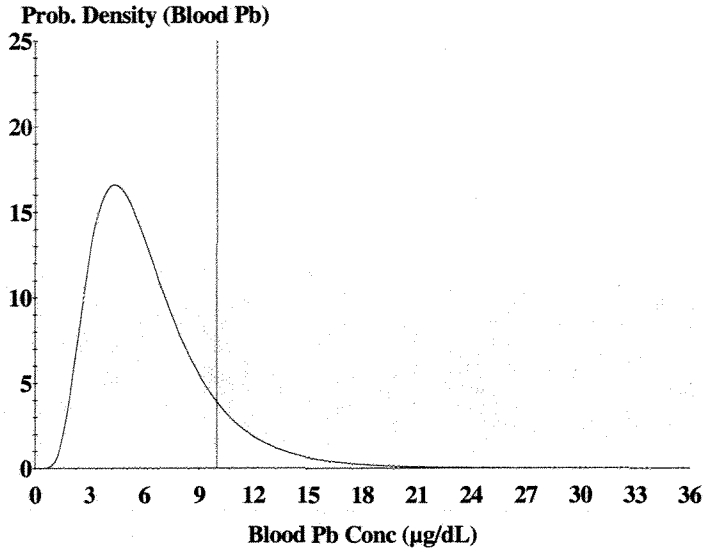
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	10.669	11.867	6.3
1-2	16.563	17.902	7.3
2-3	16.913	18.400	6.8
3-4	17.230	18.718	6.5
4-5	13.269	14.792	5.3
5-6	12.117	13.766	4.4
6-7	11.533	13.284	3.9



Cutoff = 10.000 µg/dl
Geo Mean = 5.698
GSD = 1.600
% Above = 11.573

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5007



Cutoff = 10.000 µg/dl
Geo Mean = 5.698
GSD = 1.600
% Above = 11.573
% Below = 88.427

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5007

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 5008
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 3.100 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 458.000 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	640.000	458.000
1-2	640.000	458.000
2-3	640.000	458.000
3-4	640.000	458.000
4-5	640.000	458.000
5-6	640.000	458.000
6-7	640.000	458.000

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

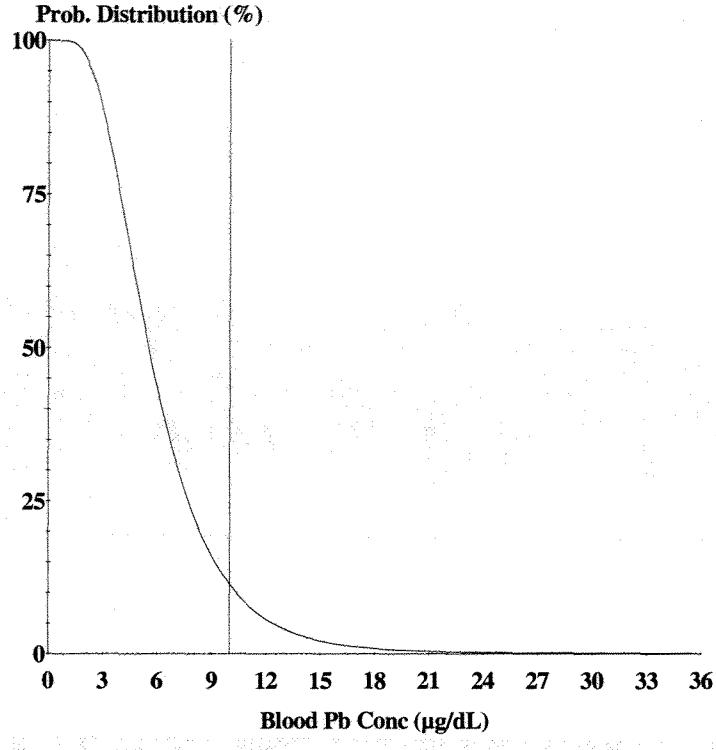
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.983	0.000	0.270
1-2	0.034	0.833	0.000	0.659
2-3	0.062	0.925	0.000	0.700
3-4	0.067	0.902	0.000	0.727
4-5	0.067	0.897	0.000	0.784
5-6	0.093	0.957	0.000	0.839
6-7	0.093	1.045	0.000	0.861

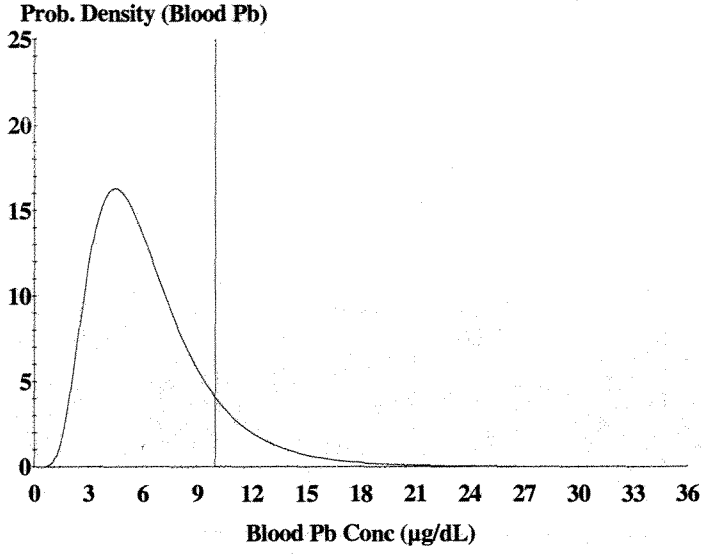
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	10.764	12.038	6.4
1-2	16.696	18.222	7.5
2-3	17.053	18.739	6.9
3-4	17.377	19.073	6.6
4-5	13.388	15.137	5.4
5-6	12.228	14.118	4.5
6-7	11.640	13.639	4.0



Cutoff = 10.000 µg/dl
Geo Mean = 5.807
GSD = 1.600
% Above = 12.376

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5008



Cutoff = 10.000 µg/dl
Geo Mean = 5.807
GSD = 1.600
% Above = 12.376
% Below = 87.624

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5008

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 5012
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 659.600 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	928.000	659.600
1-2	928.000	659.600
2-3	928.000	659.600
3-4	928.000	659.600
4-5	928.000	659.600
5-6	928.000	659.600
6-7	928.000	659.600

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

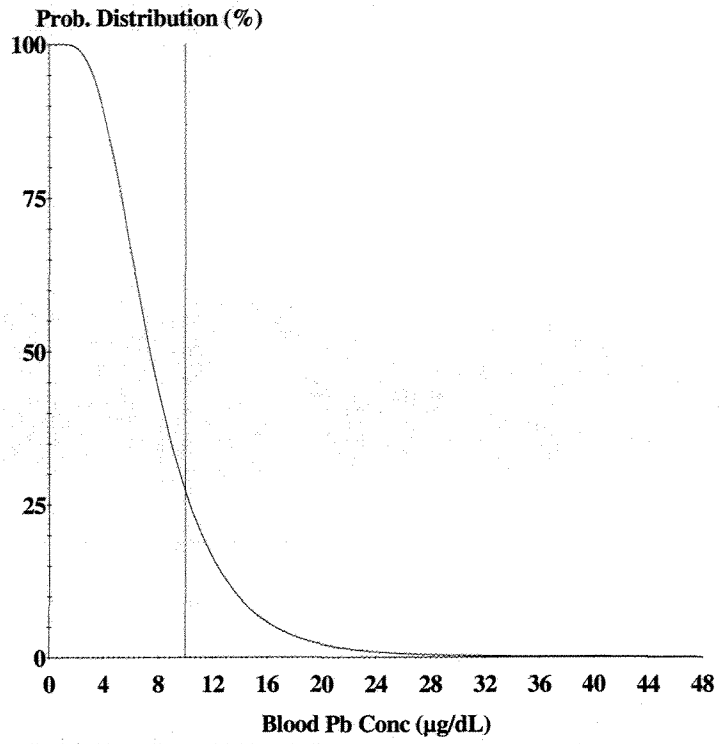
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.937	0.000	0.332
1-2	0.034	0.787	0.000	0.803
2-3	0.062	0.879	0.000	0.858
3-4	0.067	0.863	0.000	0.896
4-5	0.067	0.869	0.000	0.981
5-6	0.093	0.933	0.000	1.056
6-7	0.093	1.021	0.000	1.086

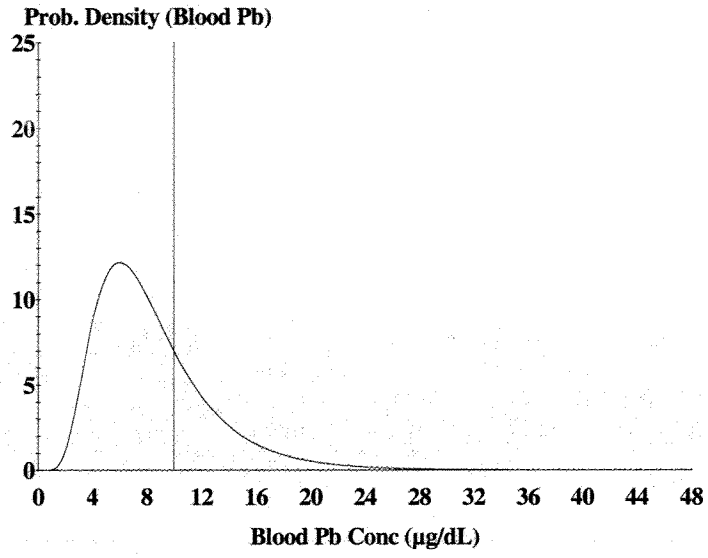
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	14.820	16.109	8.5
1-2	22.787	24.410	9.9
2-3	23.427	25.226	9.3
3-4	24.012	25.838	8.9
4-5	18.755	20.672	7.4
5-6	17.223	19.305	6.1
6-7	16.445	18.645	5.4



Cutoff = 10.000 µg/dl
Geo Mean = 7.785
GSD = 1.600
% Above = 29.709

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5012



Cutoff = 10.000 µg/dl
Geo Mean = 7.785
GSD = 1.600
% Above = 29.709
% Below = 70.291

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5012

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 5013
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 347.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	482.000	347.400
1-2	482.000	347.400
2-3	482.000	347.400
3-4	482.000	347.400
4-5	482.000	347.400
5-6	482.000	347.400
6-7	482.000	347.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

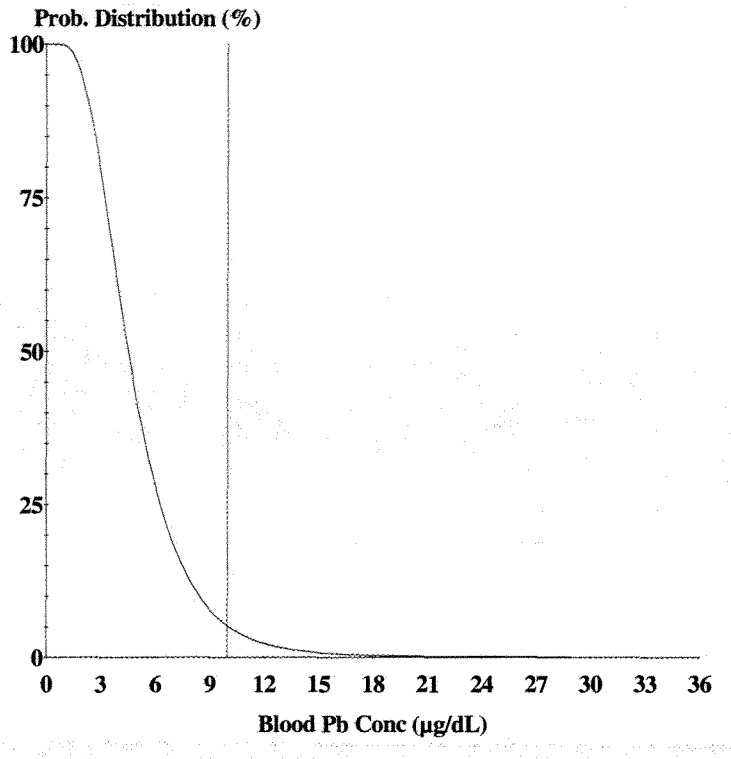
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.010	0.000	0.358
1-2	0.034	0.860	0.000	0.877
2-3	0.062	0.950	0.000	0.928
3-4	0.067	0.924	0.000	0.961
4-5	0.067	0.912	0.000	1.028
5-6	0.093	0.969	0.000	1.097
6-7	0.093	1.056	0.000	1.123

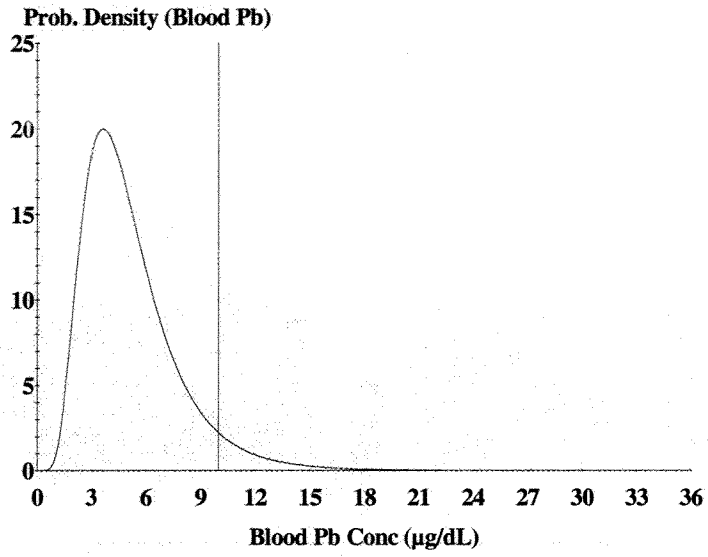
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	8.356	9.746	5.2
1-2	13.019	14.790	6.1
2-3	13.245	15.185	5.6
3-4	13.452	15.404	5.4
4-5	10.280	12.286	4.4
5-6	9.359	11.520	3.7
6-7	8.895	11.168	3.2



Cutoff = 10.000 µg/dl
Geo Mean = 4.733
GSD = 1.600
% Above = 5.574

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5013



Cutoff = 10.000 µg/dl
Geo Mean = 4.733
GSD = 1.600
% Above = 5.574
% Below = 94.426

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5013

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 5014
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 0.500 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 448.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	626.000	448.200
1-2	626.000	448.200
2-3	626.000	448.200
3-4	626.000	448.200
4-5	626.000	448.200
5-6	626.000	448.200
6-7	626.000	448.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

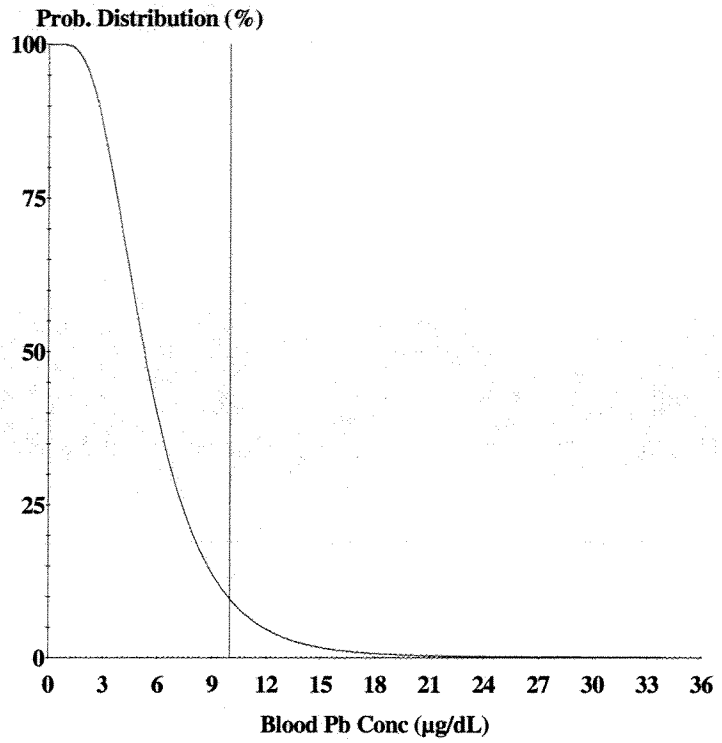
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.988	0.000	0.044
1-2	0.034	0.839	0.000	0.107
2-3	0.062	0.931	0.000	0.114
3-4	0.067	0.908	0.000	0.118
4-5	0.067	0.902	0.000	0.127
5-6	0.093	0.961	0.000	0.136
6-7	0.093	1.049	0.000	0.139

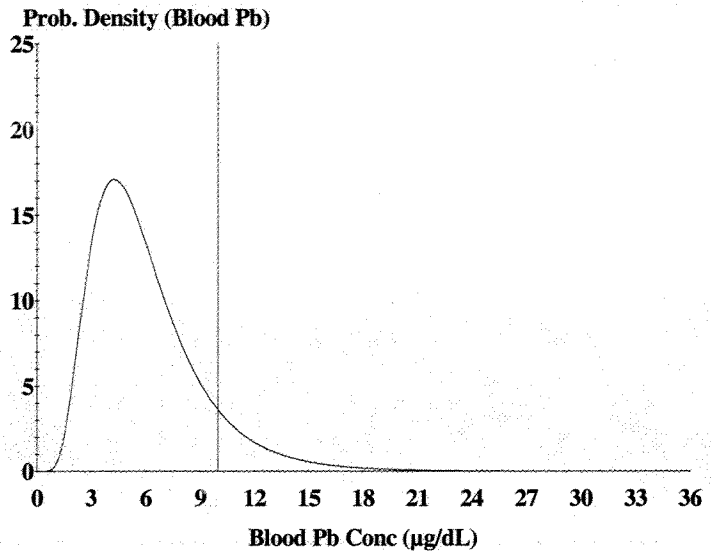
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	10.581	11.634	6.2
1-2	16.453	17.433	7.1
2-3	16.793	17.899	6.6
3-4	17.100	18.192	6.3
4-5	13.163	14.259	5.1
5-6	12.017	13.208	4.2
6-7	11.436	12.718	3.7



Cutoff = 10.000 µg/dl
Geo Mean = 5.536
GSD = 1.600
% Above = 10.415

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5014



Cutoff = 10.000 µg/dl
Geo Mean = 5.536
GSD = 1.600
% Above = 10.415
% Below = 89.585

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 5014

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20008
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 14.900 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 597.300 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	839.000	597.300
1-2	839.000	597.300
2-3	839.000	597.300
3-4	839.000	597.300
4-5	839.000	597.300
5-6	839.000	597.300
6-7	839.000	597.300

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

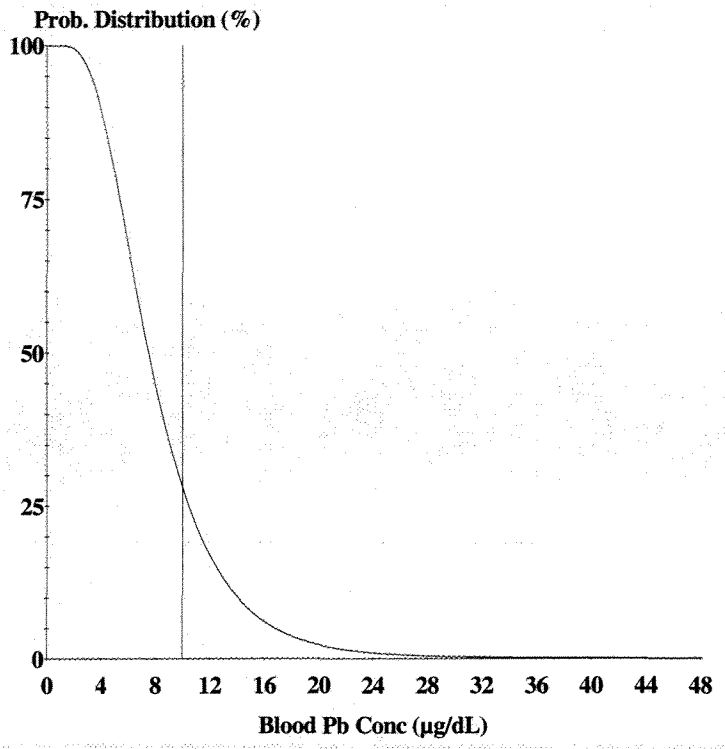
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.942	0.000	1.242
1-2	0.034	0.786	0.000	2.989
2-3	0.062	0.878	0.000	3.194
3-4	0.067	0.862	0.000	3.336
4-5	0.067	0.866	0.000	3.638
5-6	0.093	0.927	0.000	3.910
6-7	0.093	1.015	0.000	4.020

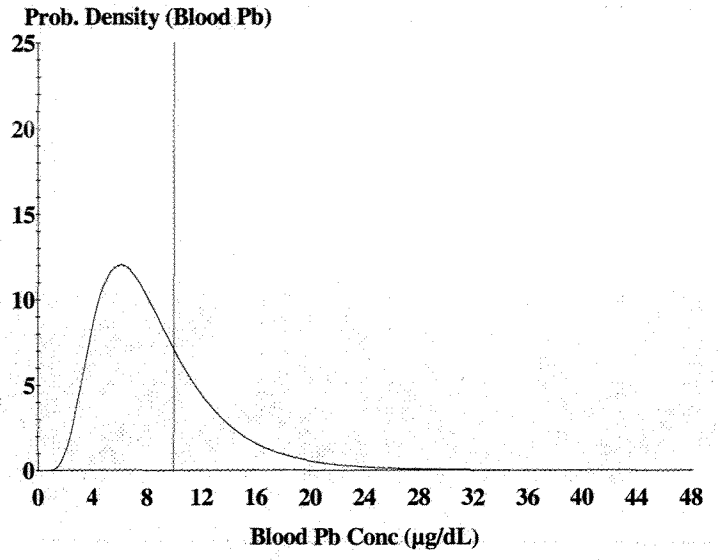
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	13.478	15.682	8.3
1-2	20.614	24.424	9.9
2-3	21.181	25.316	9.3
3-4	21.706	25.971	9.0
4-5	16.893	21.463	7.5
5-6	15.496	20.426	6.4
6-7	14.792	19.921	5.7



Cutoff = 10.000 µg/dl
Geo Mean = 7.877
GSD = 1.600
% Above = 30.585

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20008



Cutoff = 10.000 µg/dl
Geo Mean = 7.877
GSD = 1.600
% Above = 30.585
% Below = 69.415

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20008

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20027
Run Mode: Risk Assessment

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****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 0.500 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 508.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	712.000	508.400
1-2	712.000	508.400
2-3	712.000	508.400
3-4	712.000	508.400
4-5	712.000	508.400
5-6	712.000	508.400
6-7	712.000	508.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

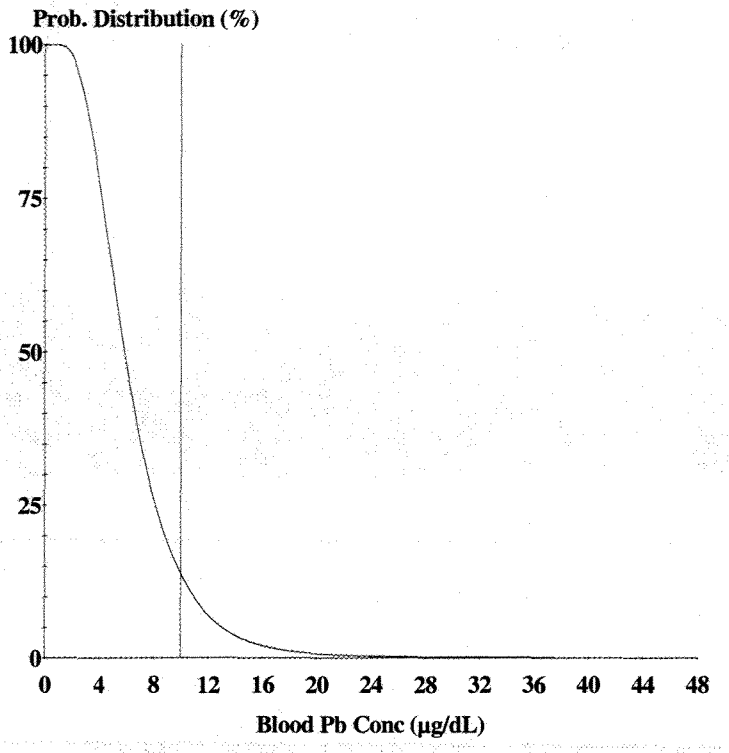
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.974	0.000	0.043
1-2	0.034	0.824	0.000	0.105
2-3	0.062	0.916	0.000	0.112
3-4	0.067	0.895	0.000	0.116
4-5	0.067	0.893	0.000	0.126
5-6	0.093	0.954	0.000	0.135
6-7	0.093	1.042	0.000	0.138

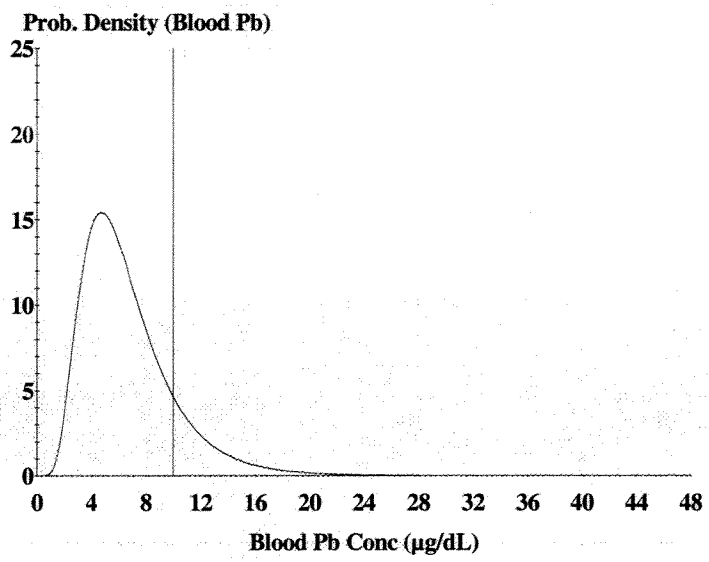
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	11.843	12.881	6.9
1-2	18.366	19.330	7.9
2-3	18.785	19.875	7.4
3-4	19.164	20.242	7.0
4-5	14.815	15.901	5.7
5-6	13.548	14.731	4.7
6-7	12.905	14.179	4.1



Cutoff = 10.000 µg/dl
Geo Mean = 6.136
GSD = 1.600
% Above = 14.939

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20027



Cutoff = 10.000 µg/dl
Geo Mean = 6.136
GSD = 1.600
% Above = 14.939
% Below = 85.061

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20027

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20028
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 262.700 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	361.000	262.700
1-2	361.000	262.700
2-3	361.000	262.700
3-4	361.000	262.700
4-5	361.000	262.700
5-6	361.000	262.700
6-7	361.000	262.700

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

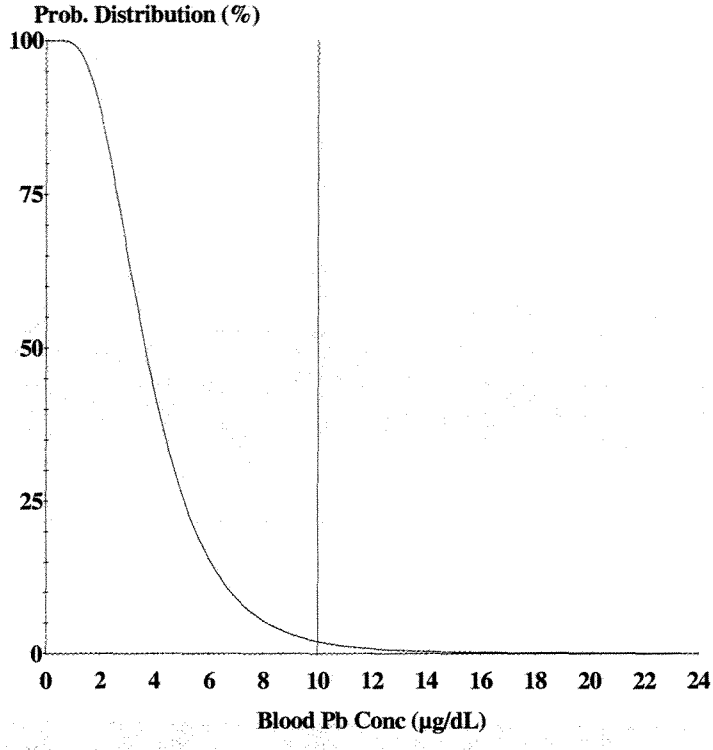
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.033	0.000	0.366
1-2	0.034	0.883	0.000	0.901
2-3	0.062	0.973	0.000	0.950
3-4	0.067	0.943	0.000	0.980
4-5	0.067	0.924	0.000	1.042
5-6	0.093	0.980	0.000	1.109
6-7	0.093	1.067	0.000	1.134

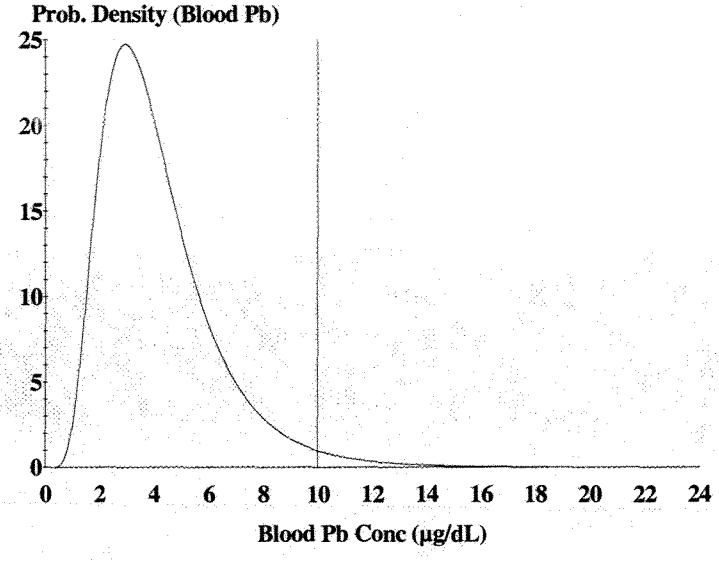
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	6.428	7.848	4.2
1-2	10.057	11.875	4.9
2-3	10.197	12.182	4.5
3-4	10.326	12.316	4.3
4-5	7.839	9.872	3.5
5-6	7.119	9.302	3.0
6-7	6.756	9.050	2.6



Cutoff = 10.000 µg/dl
Geo Mean = 3.820
GSD = 1.600
% Above = 2.031

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20028



Cutoff = 10.000 µg/dl
Geo Mean = 3.820
GSD = 1.600
% Above = 2.031
% Below = 97.969

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20028

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20070
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 140.900 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	187.000	140.900
1-2	187.000	140.900
2-3	187.000	140.900
3-4	187.000	140.900
4-5	187.000	140.900
5-6	187.000	140.900
6-7	187.000	140.900

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

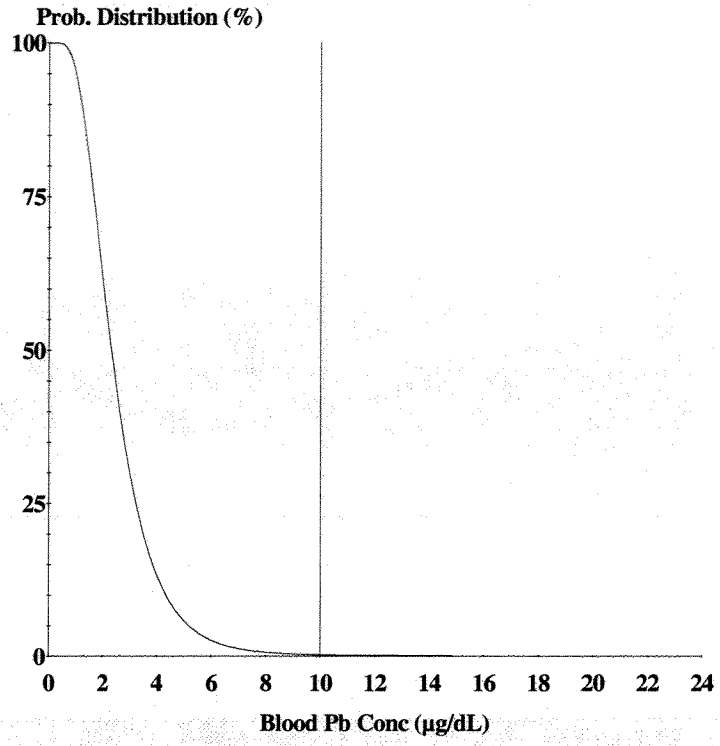
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.068	0.000	0.378
1-2	0.034	0.919	0.000	0.937
2-3	0.062	1.007	0.000	0.983
3-4	0.067	0.972	0.000	1.010
4-5	0.067	0.942	0.000	1.063
5-6	0.093	0.996	0.000	1.127
6-7	0.093	1.082	0.000	1.150

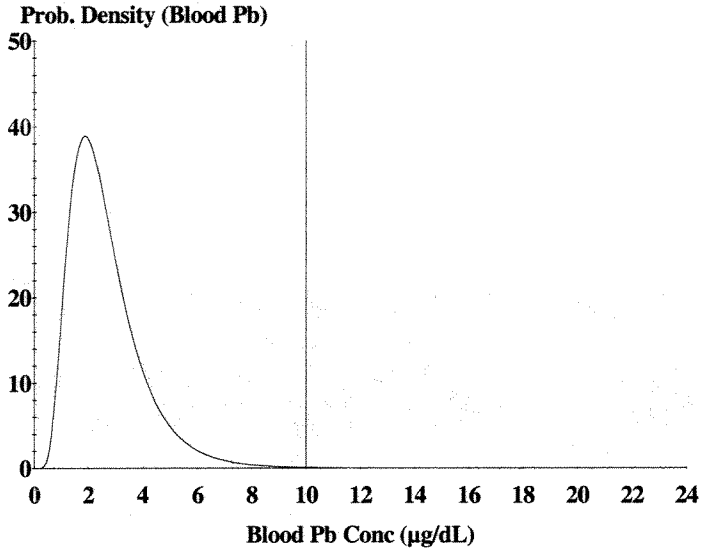
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	3.500	4.968	2.7
1-2	5.513	7.404	3.1
2-3	5.560	7.612	2.8
3-4	5.605	7.653	2.7
4-5	4.211	6.283	2.2
5-6	3.810	6.026	1.9
6-7	3.608	5.933	1.7



Cutoff = 10.000 µg/dl
Geo Mean = 2.431
GSD = 1.600
% Above = 0.131

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20070



Cutoff = 10.000 µg/dl
Geo Mean = 2.431
GSD = 1.600
% Above = 0.131
% Below = 99.869

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20070

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20108
Run Mode: Risk Assessment

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****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 588.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	826.000	588.200
1-2	826.000	588.200
2-3	826.000	588.200
3-4	826.000	588.200
4-5	826.000	588.200
5-6	826.000	588.200
6-7	826.000	588.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

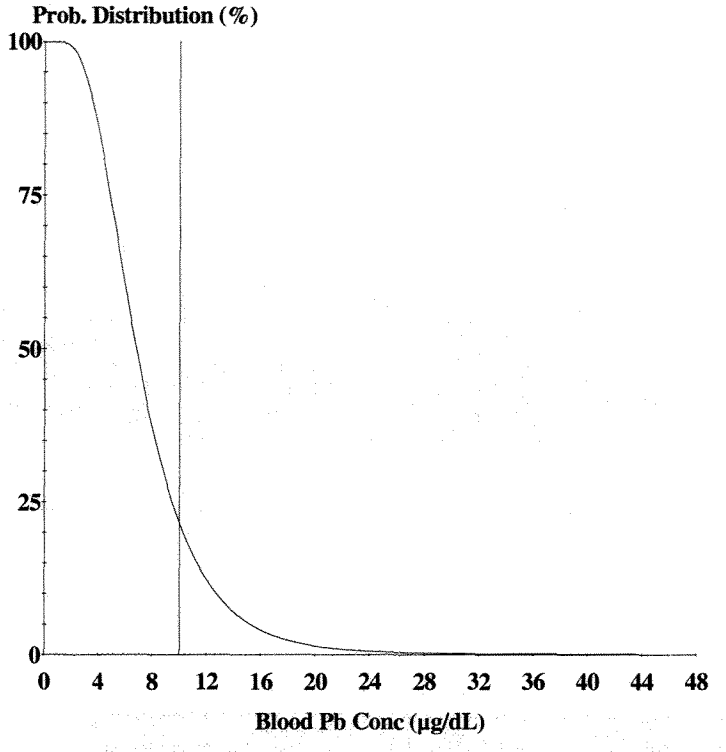
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.952	0.000	0.337
1-2	0.034	0.802	0.000	0.818
2-3	0.062	0.894	0.000	0.873
3-4	0.067	0.876	0.000	0.910
4-5	0.067	0.879	0.000	0.991
5-6	0.093	0.941	0.000	1.065
6-7	0.093	1.029	0.000	1.094

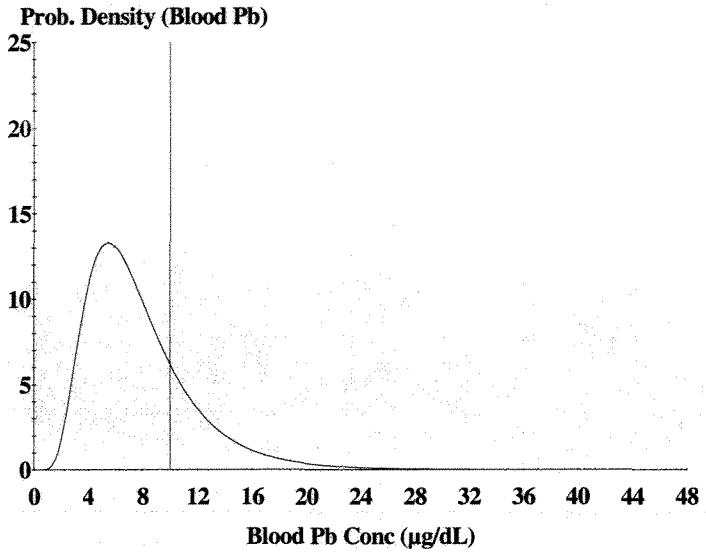
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	13.422	14.733	7.8
1-2	20.693	22.348	9.1
2-3	21.229	23.058	8.5
3-4	21.718	23.571	8.1
4-5	16.885	18.821	6.7
5-6	15.477	17.576	5.6
6-7	14.762	16.979	4.9



Cutoff = 10.000 µg/dl
Geo Mean = 7.126
GSD = 1.600
% Above = 23.544

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20108



Cutoff = 10.000 µg/dl
Geo Mean = 7.126
GSD = 1.600
% Above = 23.544
% Below = 76.456

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20108

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Model Version: 1.1 Build9
User Name: B&V
Date: 07/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20171
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 469.900 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	657.000	469.900
1-2	657.000	469.900
2-3	657.000	469.900
3-4	657.000	469.900
4-5	657.000	469.900
5-6	657.000	469.900
6-7	657.000	469.900

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

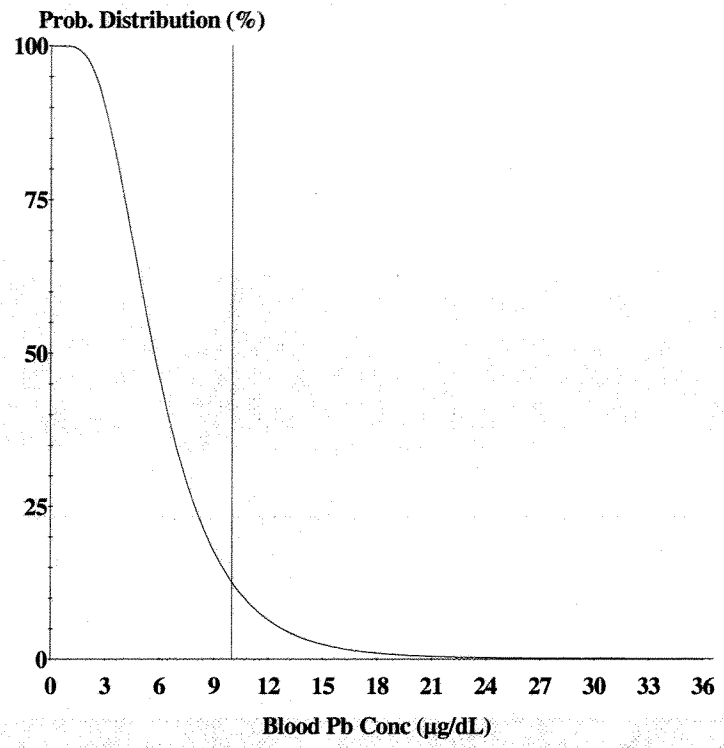
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.980	0.000	0.347
1-2	0.034	0.829	0.000	0.846
2-3	0.062	0.920	0.000	0.899
3-4	0.067	0.899	0.000	0.934
4-5	0.067	0.894	0.000	1.009
5-6	0.093	0.955	0.000	1.080
6-7	0.093	1.042	0.000	1.108

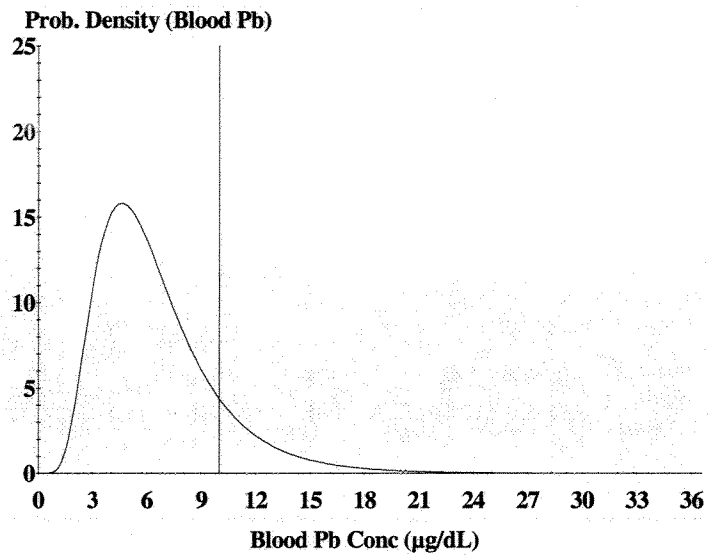
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	11.005	12.353	6.6
1-2	17.050	18.759	7.7
2-3	17.424	19.305	7.1
3-4	17.765	19.664	6.8
4-5	13.699	15.669	5.6
5-6	12.517	14.645	4.7
6-7	11.918	14.161	4.1



Cutoff = 10.000 µg/dl
Geo Mean = 5.985
GSD = 1.600
% Above = 13.737

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20171



Cutoff = 10.000 µg/dl
Geo Mean = 5.985
GSD = 1.600
% Above = 13.737
% Below = 86.263

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20171

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20173
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 640.700 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	901.000	640.700
1-2	901.000	640.700
2-3	901.000	640.700
3-4	901.000	640.700
4-5	901.000	640.700
5-6	901.000	640.700
6-7	901.000	640.700

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

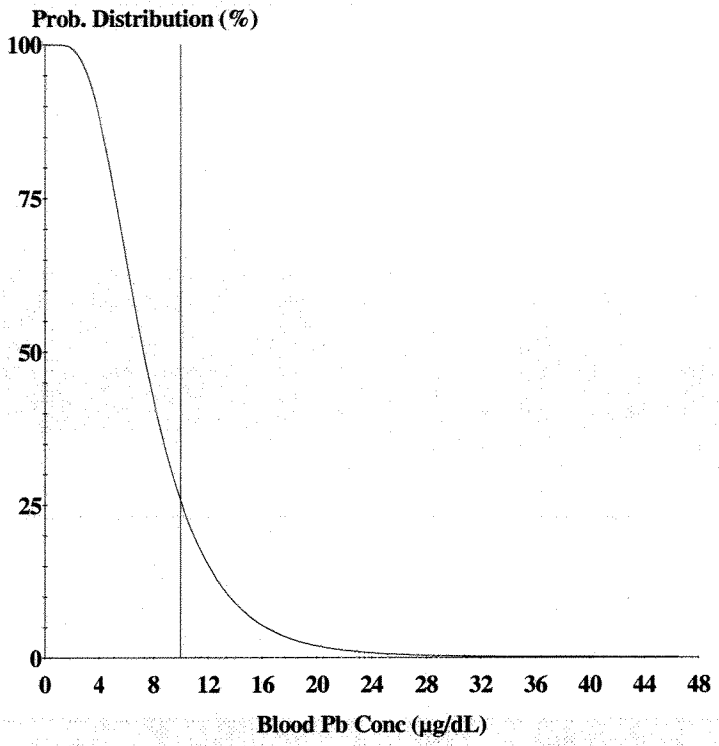
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.941	0.000	0.333
1-2	0.034	0.790	0.000	0.807
2-3	0.062	0.883	0.000	0.862
3-4	0.067	0.866	0.000	0.900
4-5	0.067	0.872	0.000	0.984
5-6	0.093	0.935	0.000	1.058
6-7	0.093	1.023	0.000	1.088

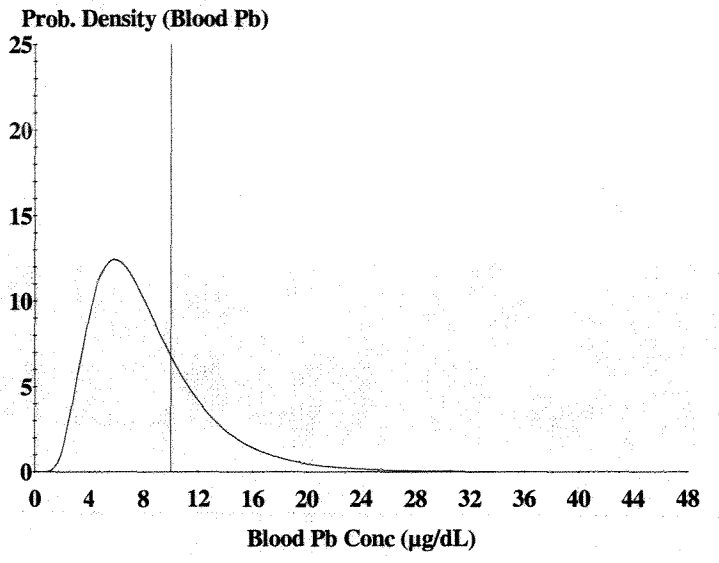
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	14.454	15.749	8.3
1-2	22.240	23.872	9.7
2-3	22.852	24.659	9.1
3-4	23.411	25.244	8.7
4-5	18.264	20.186	7.2
5-6	16.764	18.850	6.0
6-7	16.002	18.206	5.3



Cutoff = 10.000 µg/dl
Geo Mean = 7.612
GSD = 1.600
% Above = 28.080

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20173



Cutoff = 10.000 µg/dl
Geo Mean = 7.612
GSD = 1.600
% Above = 28.080
% Below = 71.920

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20173

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20187
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 305.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	422.000	305.400
1-2	422.000	305.400
2-3	422.000	305.400
3-4	422.000	305.400
4-5	422.000	305.400
5-6	422.000	305.400
6-7	422.000	305.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

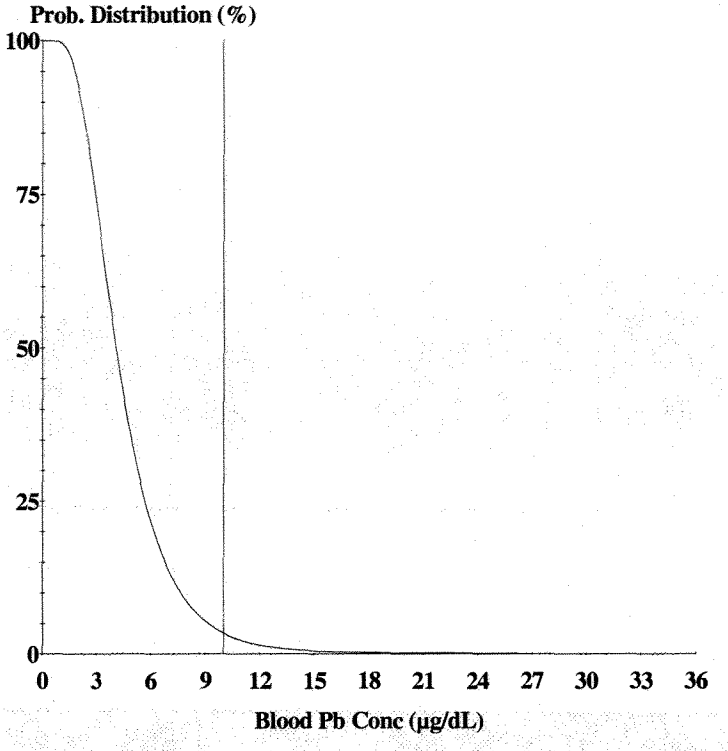
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.021	0.000	0.362
1-2	0.034	0.871	0.000	0.889
2-3	0.062	0.961	0.000	0.939
3-4	0.067	0.934	0.000	0.970
4-5	0.067	0.918	0.000	1.035
5-6	0.093	0.975	0.000	1.103
6-7	0.093	1.061	0.000	1.128

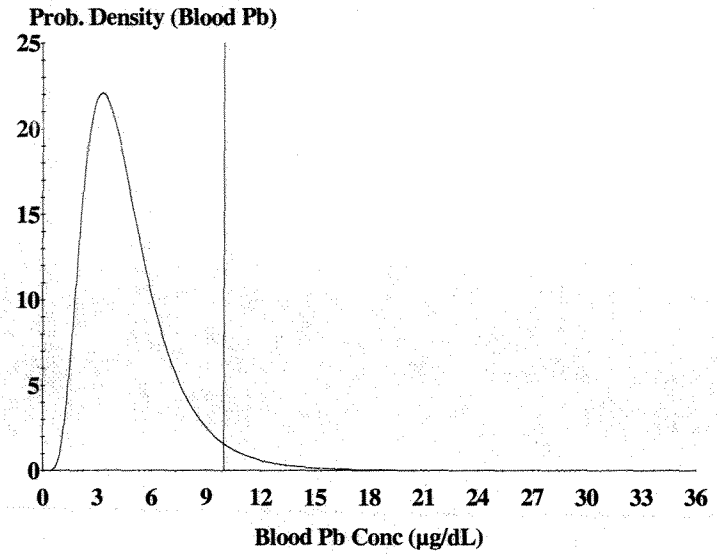
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	7.411	8.815	4.7
1-2	11.569	13.363	5.5
2-3	11.751	13.713	5.1
3-4	11.917	13.888	4.8
4-5	9.077	11.097	4.0
5-6	8.254	10.426	3.3
6-7	7.839	10.122	2.9



Cutoff = 10.000 µg/dl
Geo Mean = 4.285
GSD = 1.600
% Above = 3.570

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20187



Cutoff = 10.000 µg/dl
Geo Mean = 4.285
GSD = 1.600
% Above = 3.570
% Below = 96.430

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20187

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20331
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 798.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	1126.000	798.200
1-2	1126.000	798.200
2-3	1126.000	798.200
3-4	1126.000	798.200
4-5	1126.000	798.200
5-6	1126.000	798.200
6-7	1126.000	798.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

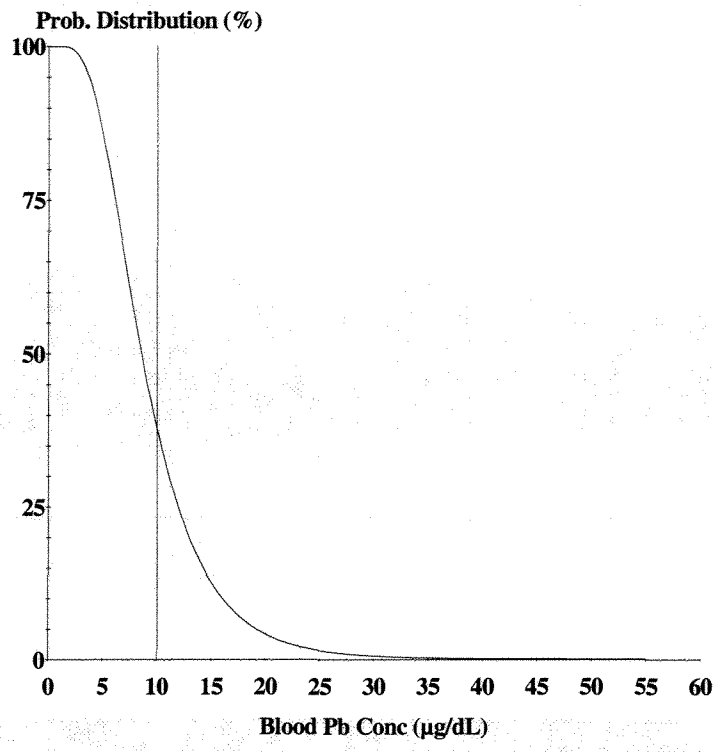
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.908	0.000	0.322
1-2	0.034	0.759	0.000	0.775
2-3	0.062	0.851	0.000	0.831
3-4	0.067	0.839	0.000	0.871
4-5	0.067	0.852	0.000	0.962
5-6	0.093	0.917	0.000	1.038
6-7	0.093	1.006	0.000	1.070

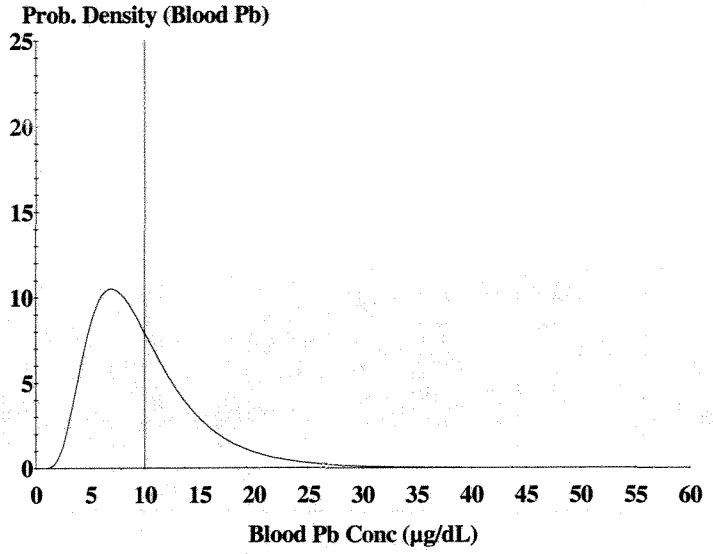
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	17.415	18.666	9.8
1-2	26.649	28.217	11.4
2-3	27.502	29.246	10.7
3-4	28.285	30.062	10.3
4-5	22.280	24.161	8.6
5-6	20.531	22.580	7.2
6-7	19.642	21.811	6.3



Cutoff = 10.000 µg/dl
Geo Mean = 9.008
GSD = 1.600
% Above = 41.202

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20331



Cutoff = 10.000 µg/dl
Geo Mean = 9.008
GSD = 1.600
% Above = 41.202
% Below = 58.798

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20331

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Model Version: 1.1 Build9
User Name: B&V
Date: 07/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20349
Run Mode: Risk Assessment

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****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 801.000 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	1130.000	801.000
1-2	1130.000	801.000
2-3	1130.000	801.000
3-4	1130.000	801.000
4-5	1130.000	801.000
5-6	1130.000	801.000
6-7	1130.000	801.000

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

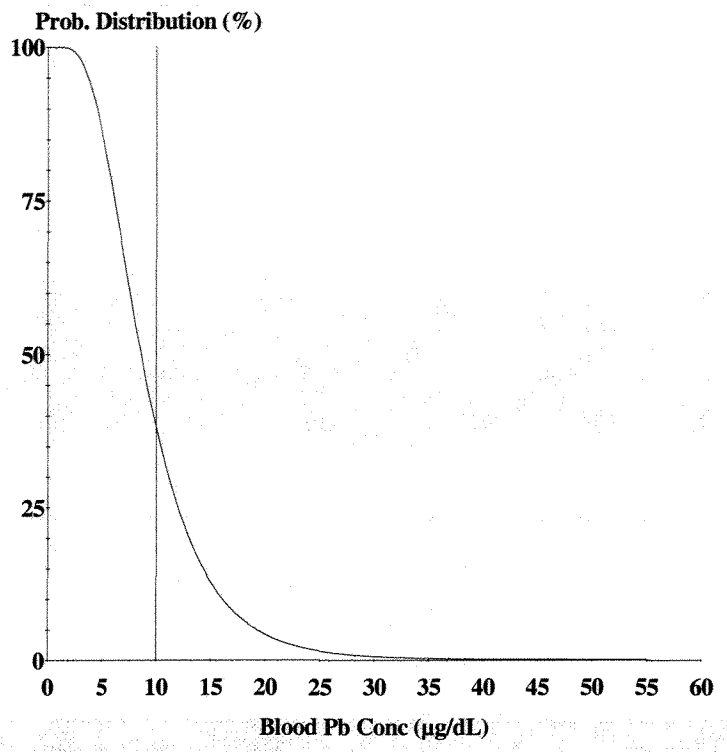
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.908	0.000	0.321
1-2	0.034	0.758	0.000	0.774
2-3	0.062	0.851	0.000	0.831
3-4	0.067	0.838	0.000	0.871
4-5	0.067	0.852	0.000	0.961
5-6	0.093	0.917	0.000	1.038
6-7	0.093	1.006	0.000	1.070

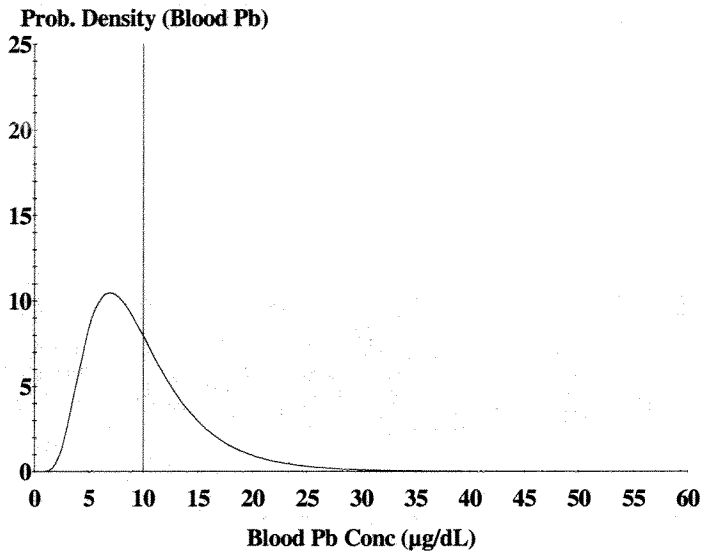
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	17.466	18.716	9.8
1-2	26.725	28.291	11.5
2-3	27.581	29.325	10.7
3-4	28.369	30.145	10.3
4-5	22.350	24.230	8.6
5-6	20.597	22.645	7.2
6-7	19.705	21.874	6.3



Cutoff = 10.000 µg/dl
Geo Mean = 9.032
GSD = 1.600
% Above = 41.423

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20349



Cutoff = 10.000 µg/dl
Geo Mean = 9.032
GSD = 1.600
% Above = 41.423
% Below = 58.577

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20349

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20397
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 606.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	852.000	606.400
1-2	852.000	606.400
2-3	852.000	606.400
3-4	852.000	606.400
4-5	852.000	606.400
5-6	852.000	606.400
6-7	852.000	606.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

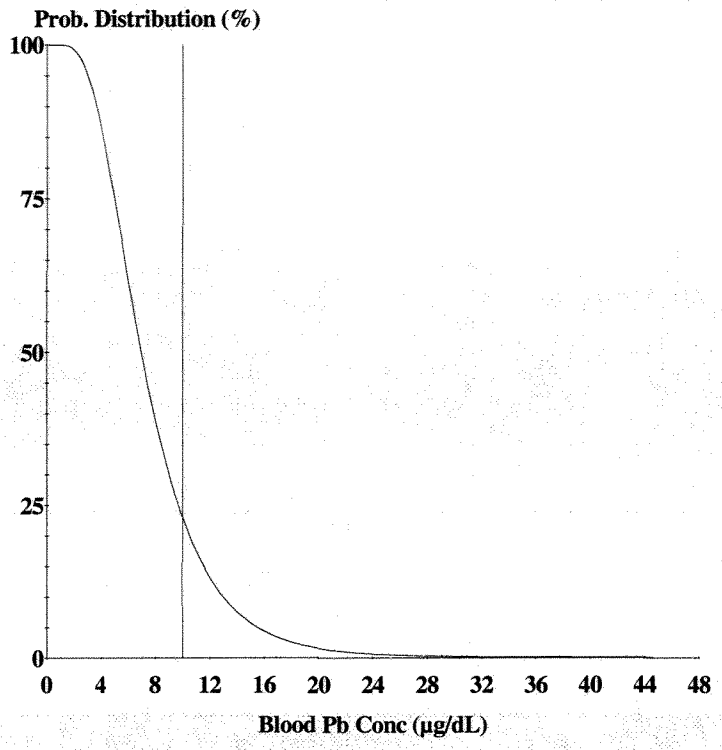
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.948	0.000	0.336
1-2	0.034	0.798	0.000	0.814
2-3	0.062	0.890	0.000	0.869
3-4	0.067	0.872	0.000	0.907
4-5	0.067	0.876	0.000	0.989
5-6	0.093	0.939	0.000	1.062
6-7	0.093	1.027	0.000	1.092

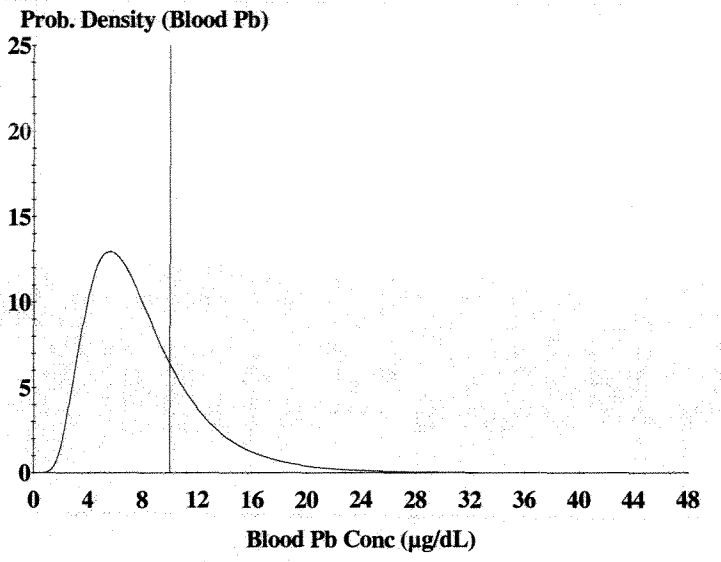
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	13.783	15.088	8.0
1-2	21.234	22.881	9.3
2-3	21.796	23.617	8.7
3-4	22.309	24.155	8.3
4-5	17.365	19.297	6.9
5-6	15.925	18.019	5.7
6-7	15.194	17.406	5.0



Cutoff = 10.000 µg/dl
Geo Mean = 7.296
GSD = 1.600
% Above = 25.115

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20397



Cutoff = 10.000 µg/dl
Geo Mean = 7.296
GSD = 1.600
% Above = 25.115
% Below = 74.885

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20397

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Model Version: 1.1 Build9
User Name: B&V
Date: 07/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20428
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 593.100 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	833.000	593.100
1-2	833.000	593.100
2-3	833.000	593.100
3-4	833.000	593.100
4-5	833.000	593.100
5-6	833.000	593.100
6-7	833.000	593.100

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

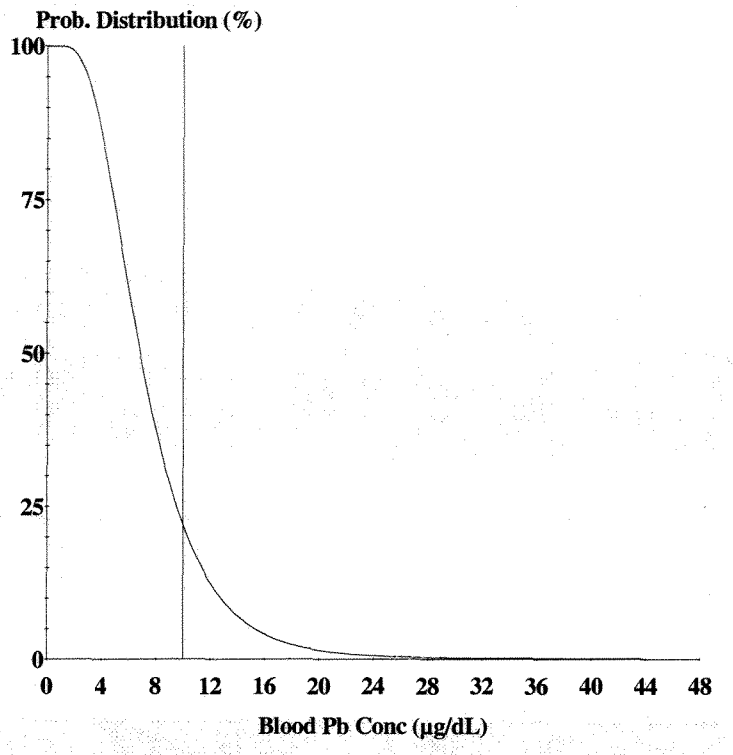
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.951	0.000	0.337
1-2	0.034	0.801	0.000	0.817
2-3	0.062	0.893	0.000	0.872
3-4	0.067	0.875	0.000	0.909
4-5	0.067	0.878	0.000	0.991
5-6	0.093	0.940	0.000	1.064
6-7	0.093	1.028	0.000	1.093

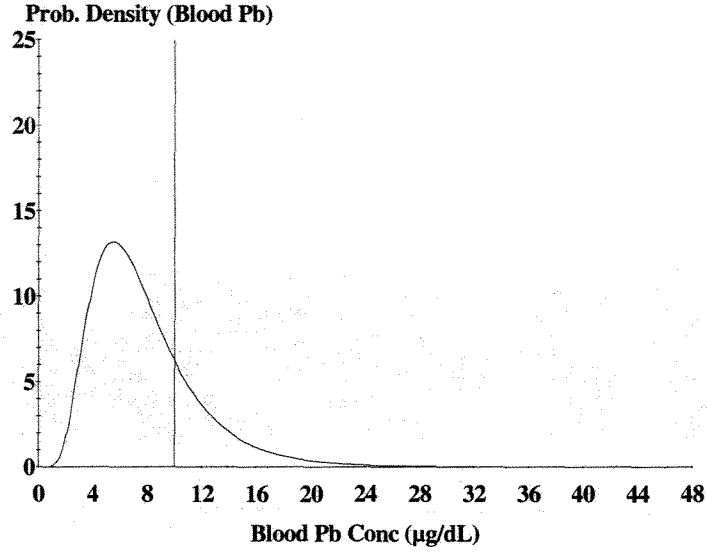
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	13.519	14.829	7.9
1-2	20.840	22.492	9.2
2-3	21.382	23.209	8.6
3-4	21.878	23.729	8.2
4-5	17.014	18.950	6.8
5-6	15.598	17.695	5.6
6-7	14.879	17.094	4.9



Cutoff = 10.000 µg/dl
Geo Mean = 7.172
GSD = 1.600
% Above = 23.967

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20428



Cutoff = 10.000 µg/dl
Geo Mean = 7.172
GSD = 1.600
% Above = 23.967
% Below = 76.033

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20428

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20437
Run Mode: Risk Assessment

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****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 6.800 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 980.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	1386.000	980.200
1-2	1386.000	980.200
2-3	1386.000	980.200
3-4	1386.000	980.200
4-5	1386.000	980.200
5-6	1386.000	980.200
6-7	1386.000	980.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

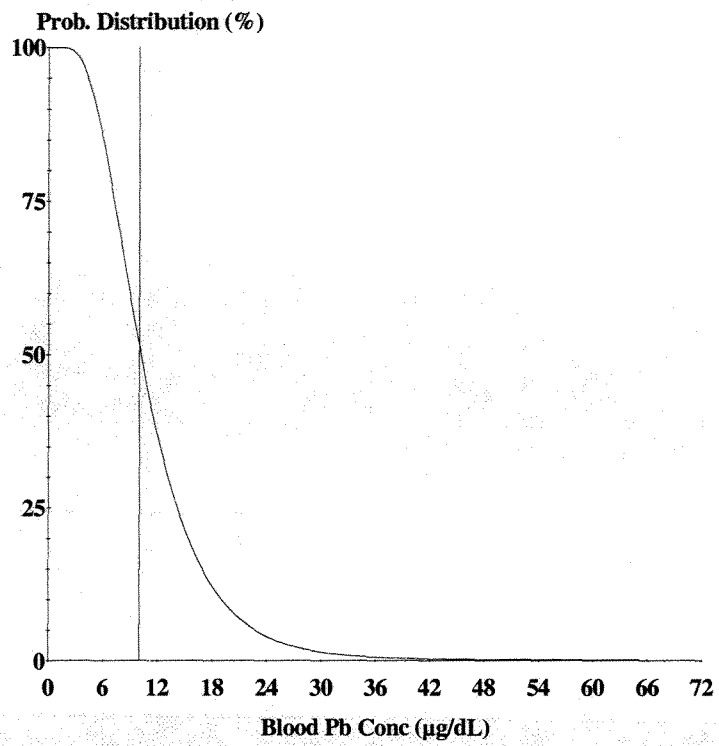
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.873	0.000	0.525
1-2	0.034	0.724	0.000	1.256
2-3	0.062	0.816	0.000	1.354
3-4	0.067	0.807	0.000	1.425
4-5	0.067	0.828	0.000	1.589
5-6	0.093	0.896	0.000	1.723
6-7	0.093	0.985	0.000	1.780

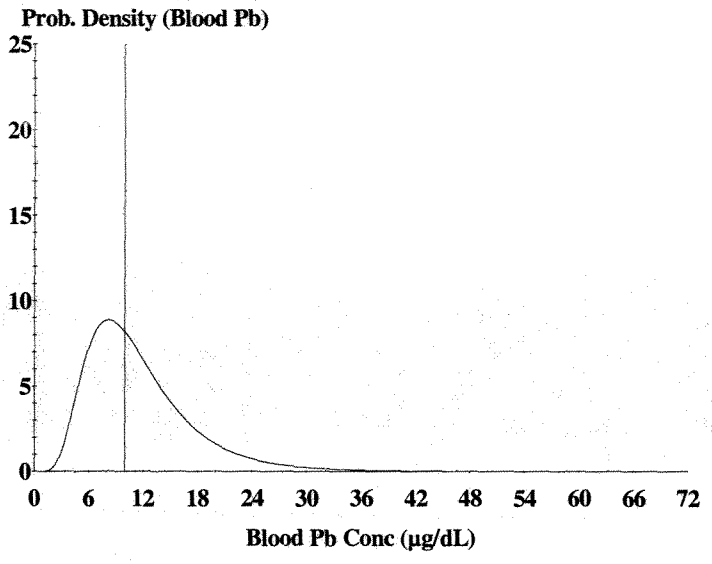
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	20.569	21.988	11.5
1-2	31.250	33.264	13.4
2-3	32.397	34.628	12.6
3-4	33.462	35.761	12.2
4-5	26.626	29.110	10.2
5-6	24.641	27.353	8.6
6-7	23.633	26.491	7.6



Cutoff = 10.000 µg/dl
Geo Mean = 10.662
GSD = 1.600
% Above = 55.425

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20437



Cutoff = 10.000 µg/dl
Geo Mean = 10.662
GSD = 1.600
% Above = 55.425
% Below = 44.575

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20437

LEAD MODEL FOR WINDOWS Version 1.1

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20758
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 63.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	76.000	63.200
1-2	76.000	63.200
2-3	76.000	63.200
3-4	76.000	63.200
4-5	76.000	63.200
5-6	76.000	63.200
6-7	76.000	63.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

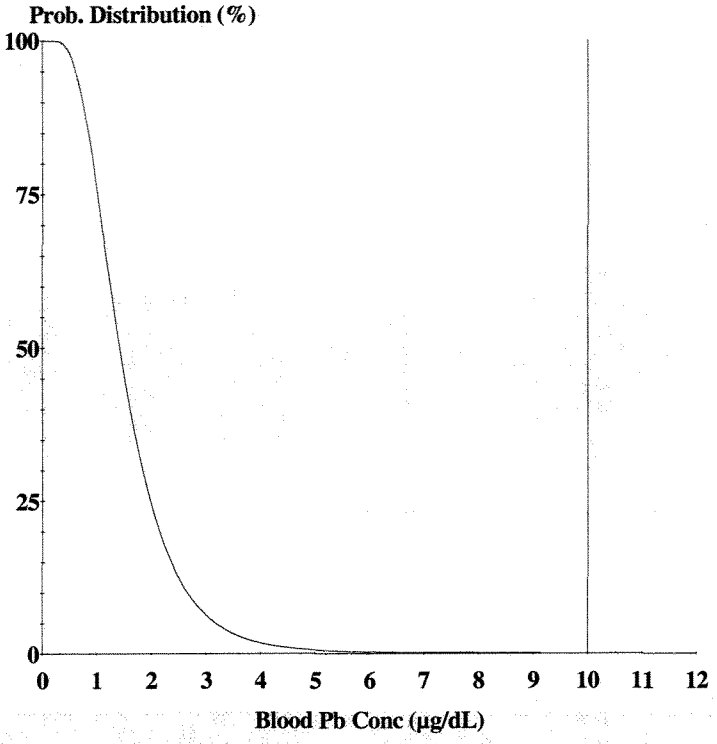
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.092	0.000	0.387
1-2	0.034	0.944	0.000	0.963
2-3	0.062	1.030	0.000	1.006
3-4	0.067	0.992	0.000	1.031
4-5	0.067	0.955	0.000	1.077
5-6	0.093	1.006	0.000	1.139
6-7	0.093	1.091	0.000	1.160

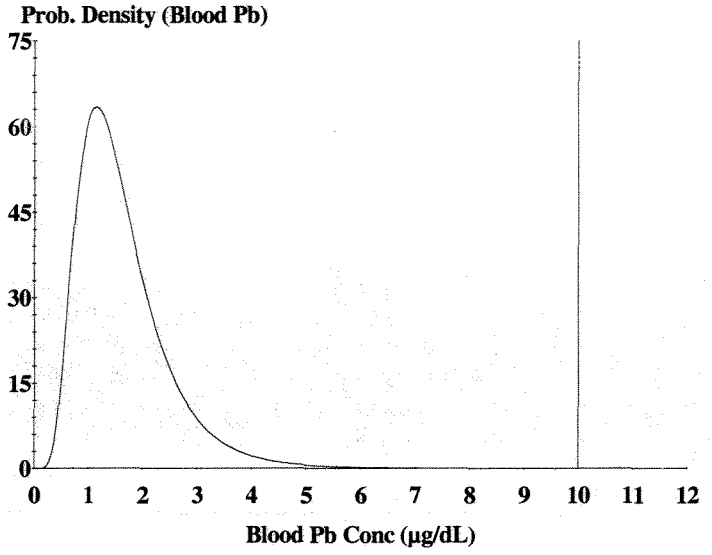
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	1.527	3.027	1.7
1-2	2.416	4.357	1.8
2-3	2.427	4.526	1.7
3-4	2.439	4.528	1.6
4-5	1.820	3.918	1.4
5-6	1.642	3.881	1.2
6-7	1.553	3.898	1.1



Cutoff = 10.000 µg/dl
Geo Mean = 1.493
GSD = 1.600
% Above = 0.003

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20758



Cutoff = 10.000 µg/dl
Geo Mean = 1.493
GSD = 1.600
% Above = 0.003
% Below = 99.997

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20758

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20767
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 0.500 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 350.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	486.000	350.200
1-2	486.000	350.200
2-3	486.000	350.200
3-4	486.000	350.200
4-5	486.000	350.200
5-6	486.000	350.200
6-7	486.000	350.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

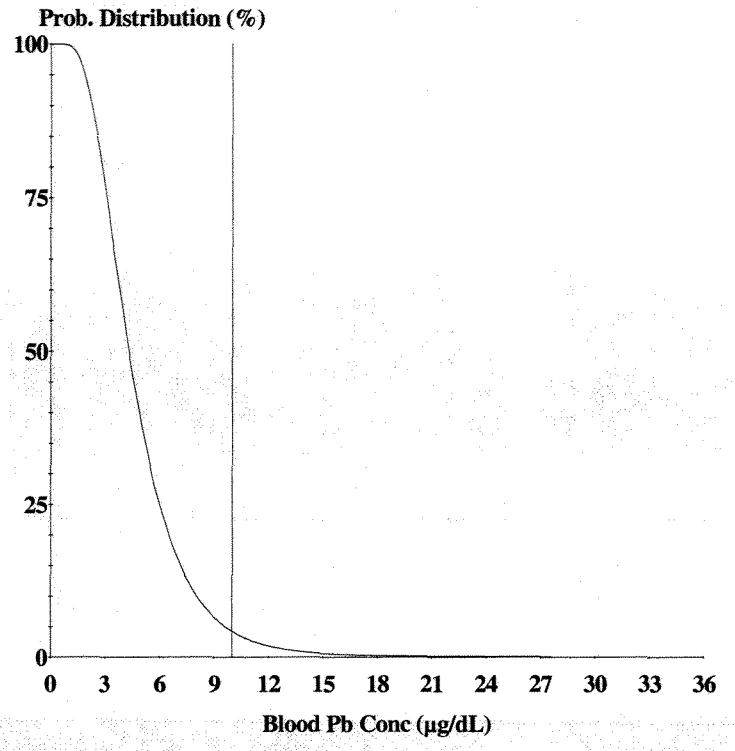
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.013	0.000	0.045
1-2	0.034	0.864	0.000	0.110
2-3	0.062	0.955	0.000	0.117
3-4	0.067	0.928	0.000	0.121
4-5	0.067	0.915	0.000	0.129
5-6	0.093	0.974	0.000	0.138
6-7	0.093	1.061	0.000	0.141

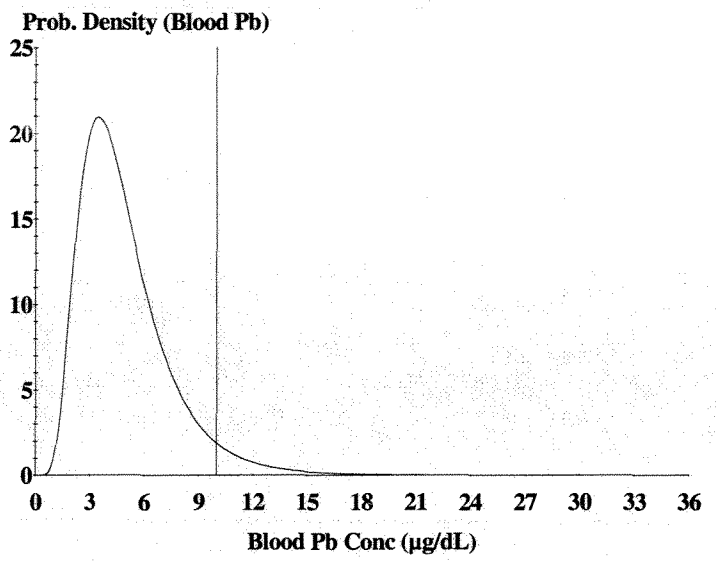
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	8.447	9.526	5.1
1-2	13.195	14.204	5.8
2-3	13.419	14.552	5.4
3-4	13.621	14.737	5.1
4-5	10.408	11.520	4.2
5-6	9.475	10.680	3.4
6-7	9.003	10.298	3.0



Cutoff = 10.000 µg/dl
Geo Mean = 4.519
GSD = 1.600
% Above = 4.550

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20767



Cutoff = 10.000 µg/dl
Geo Mean = 4.519
GSD = 1.600
% Above = 4.550
% Below = 95.450

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20767

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 20918
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 926.300 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	1309.000	926.300
1-2	1309.000	926.300
2-3	1309.000	926.300
3-4	1309.000	926.300
4-5	1309.000	926.300
5-6	1309.000	926.300
6-7	1309.000	926.300

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

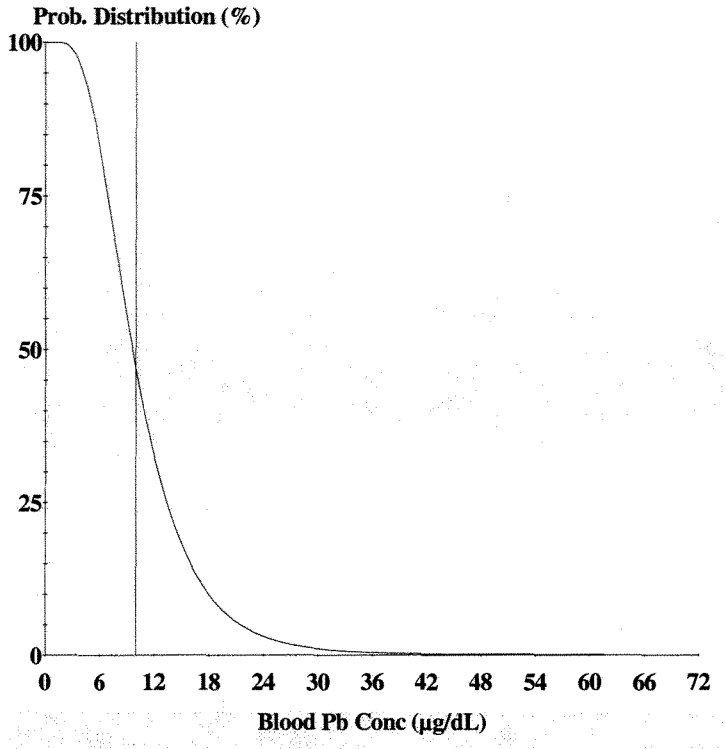
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.884	0.000	0.313
1-2	0.034	0.736	0.000	0.751
2-3	0.062	0.828	0.000	0.808
3-4	0.067	0.818	0.000	0.850
4-5	0.067	0.837	0.000	0.945
5-6	0.093	0.904	0.000	1.023
6-7	0.093	0.993	0.000	1.056

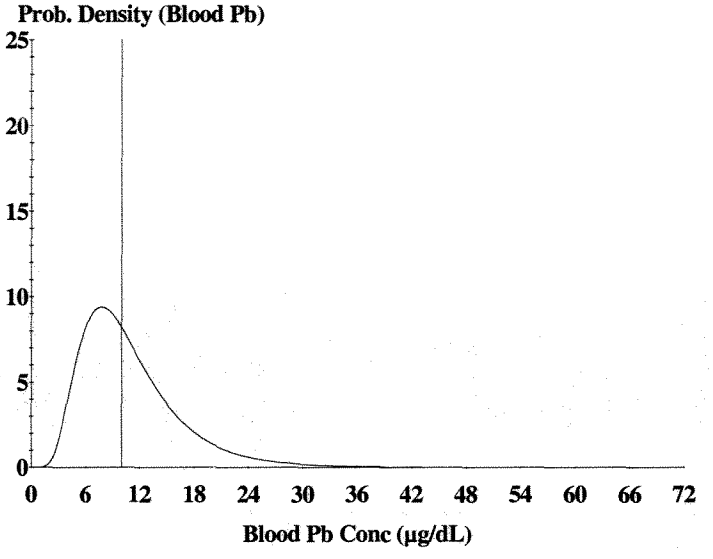
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	19.688	20.906	10.9
1-2	30.008	31.529	12.7
2-3	31.064	32.762	12.0
3-4	32.041	33.775	11.6
4-5	25.422	27.271	9.6
5-6	23.497	25.517	8.1
6-7	22.517	24.659	7.1



Cutoff = 10.000 µg/dl
Geo Mean = 10.078
GSD = 1.600
% Above = 50.659

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20918



Cutoff = 10.000 µg/dl
Geo Mean = 10.078
GSD = 1.600
% Above = 50.659
% Below = 49.341

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 20918

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 23264
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 5.700 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 313.800 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	434.000	313.800
1-2	434.000	313.800
2-3	434.000	313.800
3-4	434.000	313.800
4-5	434.000	313.800
5-6	434.000	313.800
6-7	434.000	313.800

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

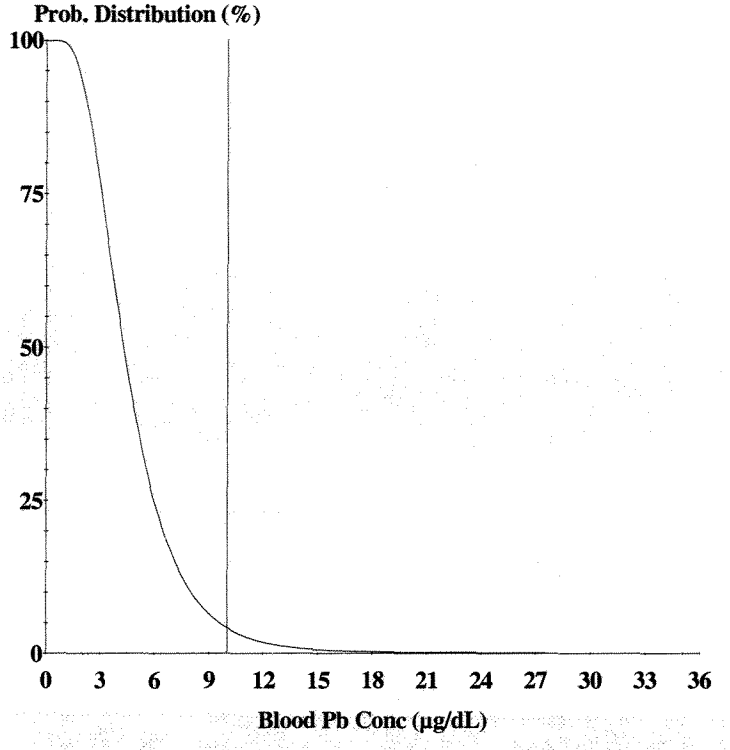
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.018	0.000	0.513
1-2	0.034	0.866	0.000	1.259
2-3	0.062	0.956	0.000	1.331
3-4	0.067	0.929	0.000	1.376
4-5	0.067	0.914	0.000	1.470
5-6	0.093	0.972	0.000	1.567
6-7	0.093	1.058	0.000	1.603

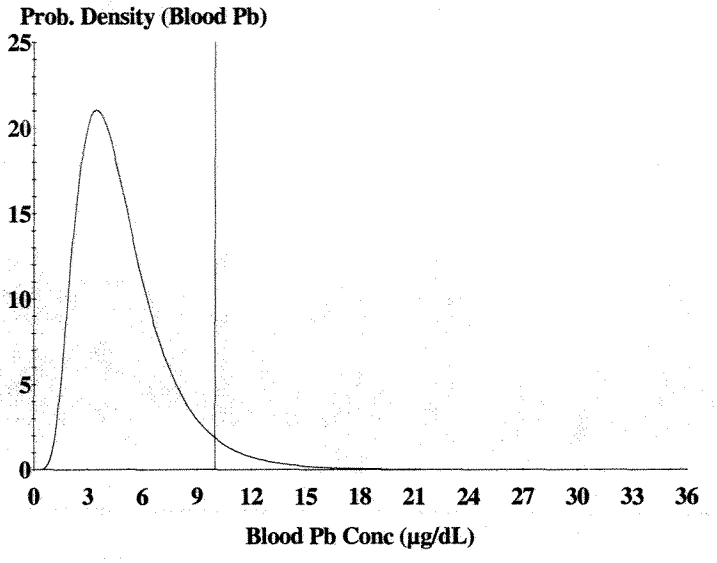
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	7.589	9.141	4.9
1-2	11.826	13.985	5.7
2-3	12.019	14.368	5.3
3-4	12.197	14.569	5.1
4-5	9.298	11.749	4.2
5-6	8.458	11.090	3.5
6-7	8.035	10.789	3.1



Cutoff = 10.000 µg/dl
Geo Mean = 4.495
GSD = 1.600
% Above = 4.445

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 23264



Cutoff = 10.000 µg/dl
Geo Mean = 4.495
GSD = 1.600
% Above = 4.445
% Below = 95.555

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 23264

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 23378
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 0.500 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 2986.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	4252.000	2986.400
1-2	4252.000	2986.400
2-3	4252.000	2986.400
3-4	4252.000	2986.400
4-5	4252.000	2986.400
5-6	4252.000	2986.400
6-7	4252.000	2986.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

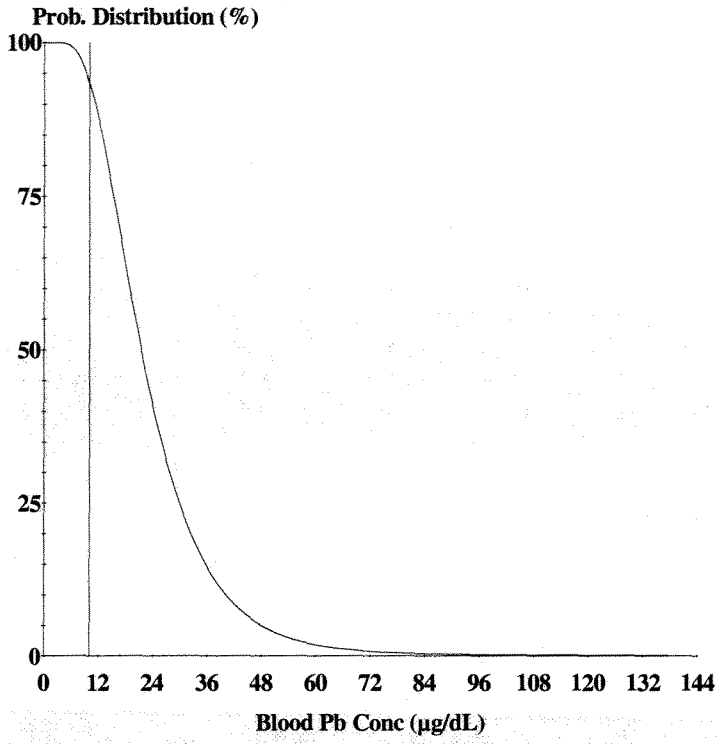
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.646	0.000	0.029
1-2	0.034	0.522	0.000	0.067
2-3	0.062	0.601	0.000	0.073
3-4	0.067	0.607	0.000	0.079
4-5	0.067	0.666	0.000	0.094
5-6	0.093	0.743	0.000	0.105
6-7	0.093	0.832	0.000	0.111

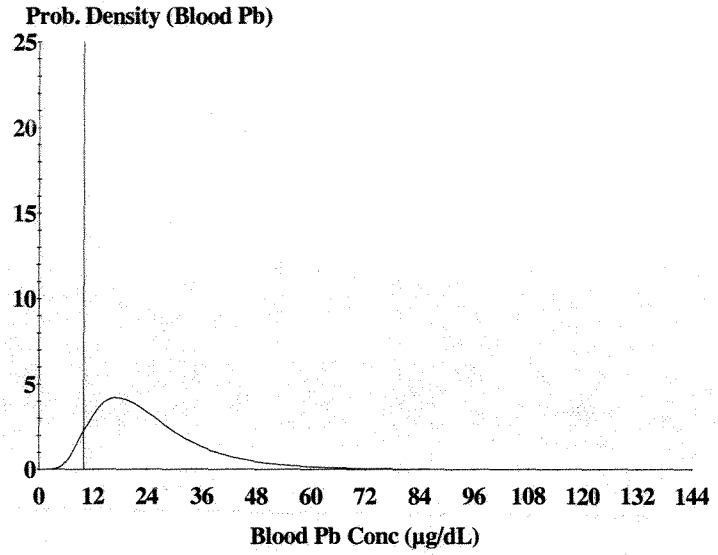
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	46.554	47.250	23.6
1-2	68.889	69.512	27.2
2-3	72.986	73.722	25.9
3-4	77.044	77.797	25.6
4-5	65.459	66.285	22.2
5-6	62.488	63.429	19.4
6-7	61.044	62.080	17.4



Cutoff = 10.000 µg/dl
Geo Mean = 22.498
GSD = 1.600
% Above = 95.776

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 23378



Cutoff = 10.000 µg/dl
Geo Mean = 22.498
GSD = 1.600
% Above = 95.776
% Below = 4.224

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 23378

LEAD MODEL FOR WINDOWS Version 1.1

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 23575
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 12.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 136.000 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	180.000	136.000
1-2	180.000	136.000
2-3	180.000	136.000
3-4	180.000	136.000
4-5	180.000	136.000
5-6	180.000	136.000
6-7	180.000	136.000

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

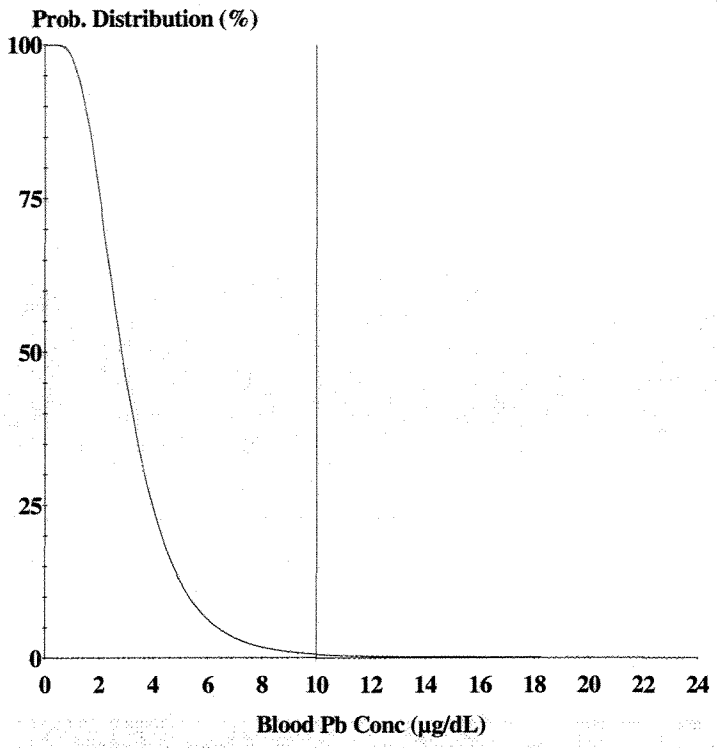
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.061	0.000	1.127
1-2	0.034	0.906	0.000	2.774
2-3	0.062	0.994	0.000	2.913
3-4	0.067	0.961	0.000	2.997
4-5	0.067	0.933	0.000	3.157
5-6	0.093	0.986	0.000	3.348
6-7	0.093	1.071	0.000	3.417

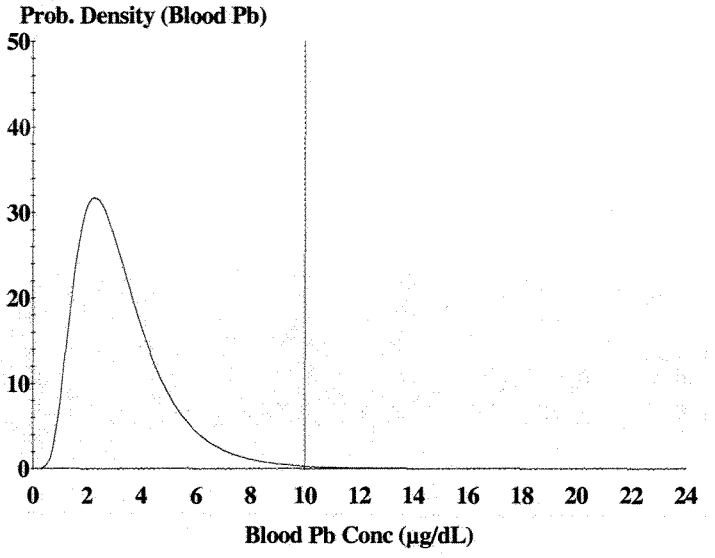
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	3.351	5.559	3.0
1-2	5.241	8.955	3.7
2-3	5.292	9.262	3.5
3-4	5.343	9.368	3.3
4-5	4.017	8.173	2.8
5-6	3.636	8.063	2.5
6-7	3.445	8.027	2.3



Cutoff = 10.000 µg/dl
Geo Mean = 2.982
GSD = 1.600
% Above = 0.502

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 23575



Cutoff = 10.000 µg/dl
Geo Mean = 2.982
GSD = 1.600
% Above = 0.502
% Below = 99.498

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 23575

LEAD MODEL FOR WINDOWS Version 1.1

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30079
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 1.300 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 203.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	276.000	203.200
1-2	276.000	203.200
2-3	276.000	203.200
3-4	276.000	203.200
4-5	276.000	203.200
5-6	276.000	203.200
6-7	276.000	203.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

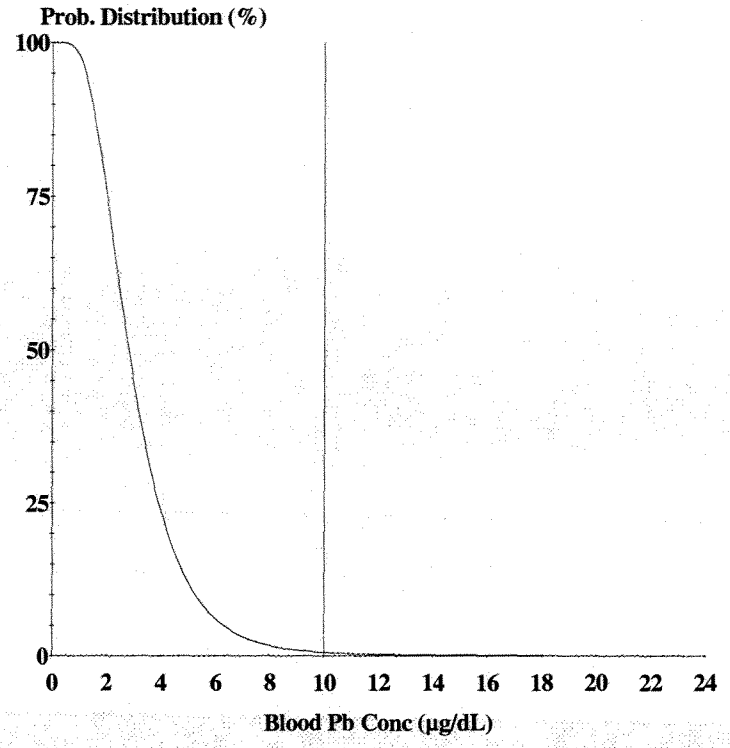
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.053	0.000	0.121
1-2	0.034	0.904	0.000	0.300
2-3	0.062	0.993	0.000	0.315
3-4	0.067	0.961	0.000	0.325
4-5	0.067	0.936	0.000	0.343
5-6	0.093	0.991	0.000	0.365
6-7	0.093	1.077	0.000	0.372

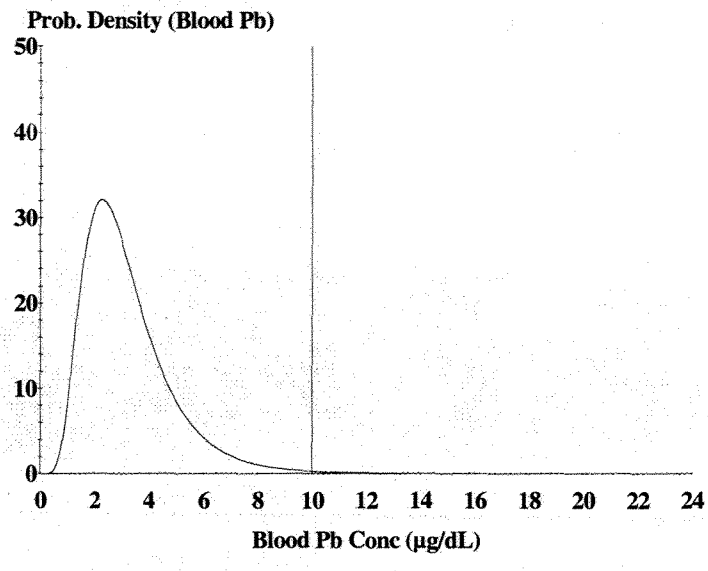
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	5.036	6.230	3.4
1-2	7.923	9.161	3.8
2-3	8.008	9.379	3.5
3-4	8.088	9.440	3.3
4-5	6.107	7.454	2.7
5-6	5.535	6.984	2.2
6-7	5.247	6.790	2.0



Cutoff = 10.000 µg/dl
Geo Mean = 2.951
GSD = 1.600
% Above = 0.471

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30079



Cutoff = 10.000 µg/dl
Geo Mean = 2.951
GSD = 1.600
% Above = 0.471
% Below = 99.529

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30079

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30126
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 319.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	442.000	319.400
1-2	442.000	319.400
2-3	442.000	319.400
3-4	442.000	319.400
4-5	442.000	319.400
5-6	442.000	319.400
6-7	442.000	319.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

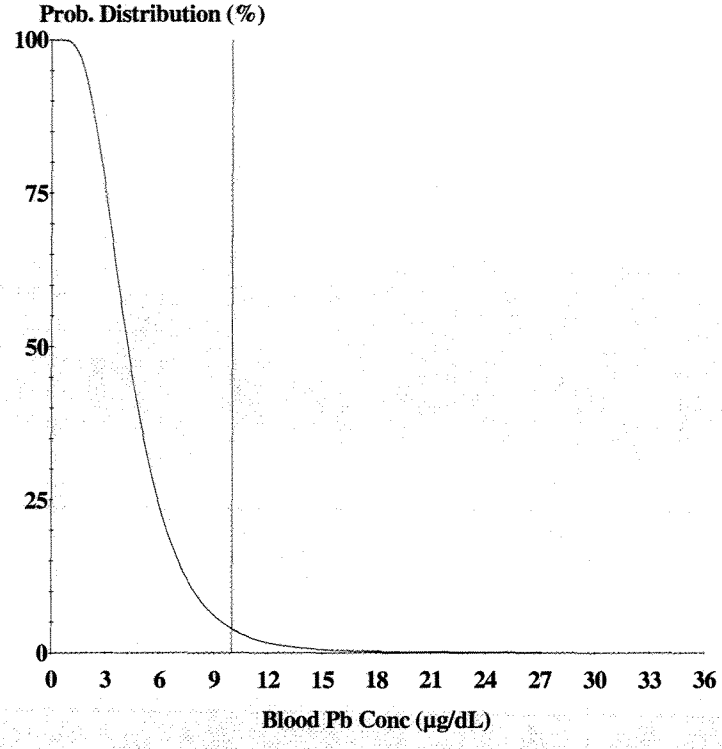
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.018	0.000	0.360
1-2	0.034	0.867	0.000	0.885
2-3	0.062	0.958	0.000	0.935
3-4	0.067	0.931	0.000	0.967
4-5	0.067	0.916	0.000	1.033
5-6	0.093	0.973	0.000	1.101
6-7	0.093	1.060	0.000	1.127

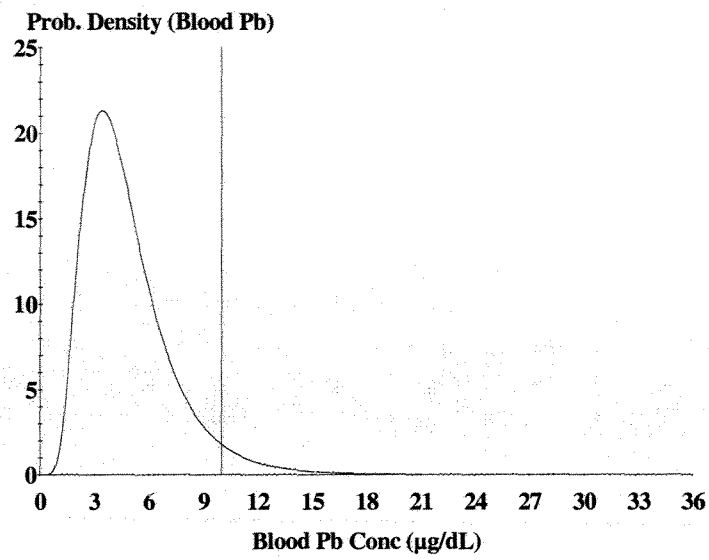
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	7.728	9.127	4.9
1-2	12.056	13.842	5.7
2-3	12.253	14.207	5.3
3-4	12.432	14.396	5.0
4-5	9.480	11.495	4.1
5-6	8.624	10.792	3.5
6-7	8.192	10.472	3.0



Cutoff = 10.000 µg/dl
Geo Mean = 4.436
GSD = 1.600
% Above = 4.185

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30126



Cutoff = 10.000 µg/dl
Geo Mean = 4.436
GSD = 1.600
% Above = 4.185
% Below = 95.815

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30126

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30172
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 495.100 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	693.000	495.100
1-2	693.000	495.100
2-3	693.000	495.100
3-4	693.000	495.100
4-5	693.000	495.100
5-6	693.000	495.100
6-7	693.000	495.100

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

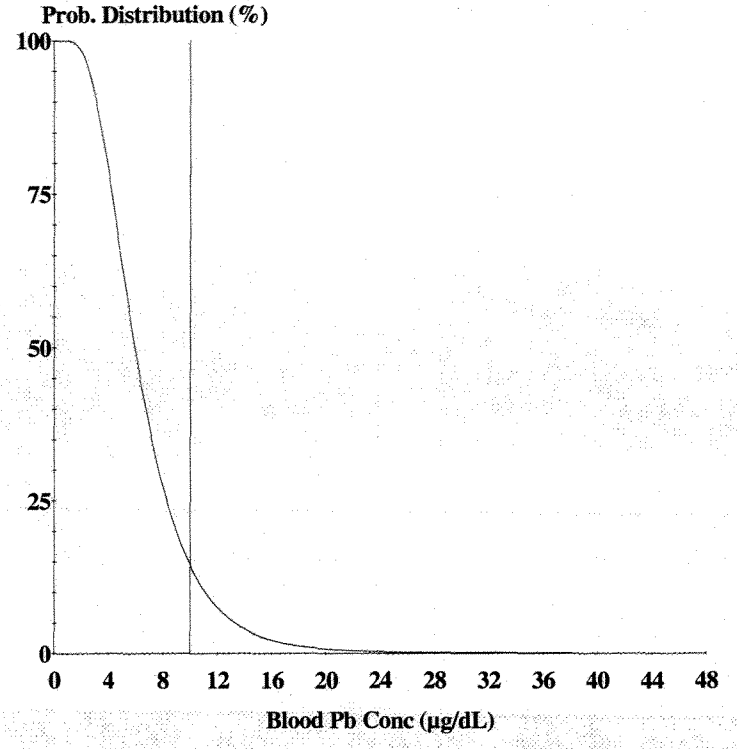
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.974	0.000	0.345
1-2	0.034	0.823	0.000	0.840
2-3	0.062	0.915	0.000	0.893
3-4	0.067	0.894	0.000	0.929
4-5	0.067	0.891	0.000	1.005
5-6	0.093	0.952	0.000	1.077
6-7	0.093	1.039	0.000	1.105

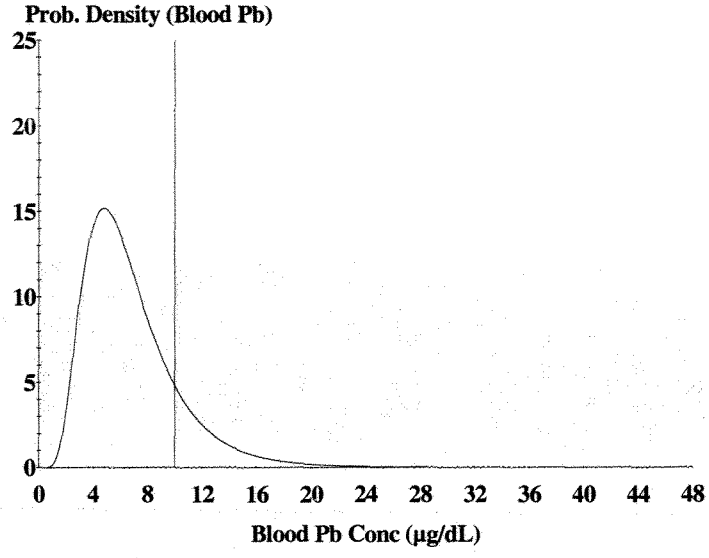
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	11.531	12.871	6.9
1-2	17.845	19.542	8.0
2-3	18.253	20.123	7.4
3-4	18.624	20.513	7.1
4-5	14.387	16.350	5.8
5-6	13.154	15.276	4.9
6-7	12.530	14.767	4.3



Cutoff = 10.000 µg/dl
Geo Mean = 6.233
GSD = 1.600
% Above = 15.727

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30172



Cutoff = 10.000 µg/dl
Geo Mean = 6.233
GSD = 1.600
% Above = 15.727
% Below = 84.273

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30172

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30177
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 490.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	686.000	490.200
1-2	686.000	490.200
2-3	686.000	490.200
3-4	686.000	490.200
4-5	686.000	490.200
5-6	686.000	490.200
6-7	686.000	490.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

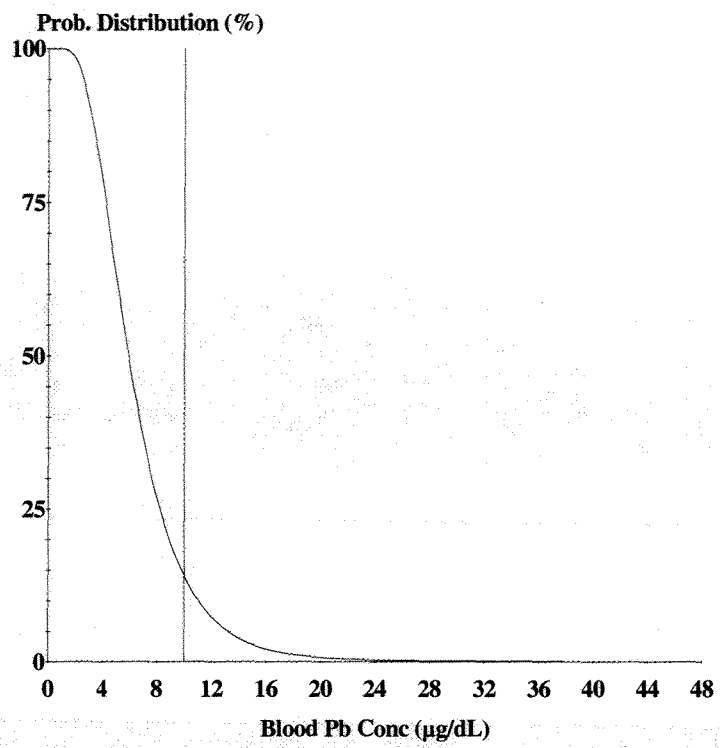
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.975	0.000	0.345
1-2	0.034	0.824	0.000	0.841
2-3	0.062	0.916	0.000	0.894
3-4	0.067	0.895	0.000	0.930
4-5	0.067	0.892	0.000	1.006
5-6	0.093	0.952	0.000	1.078
6-7	0.093	1.040	0.000	1.105

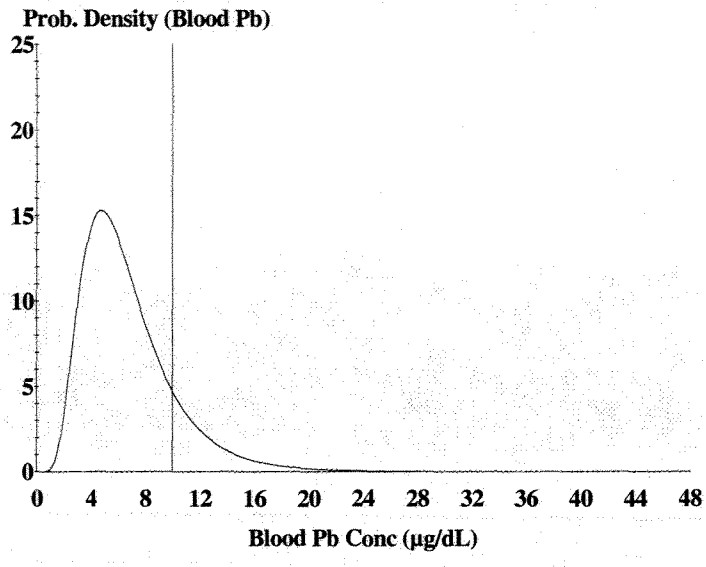
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	11.429	12.771	6.8
1-2	17.692	19.391	7.9
2-3	18.092	19.964	7.4
3-4	18.457	20.349	7.1
4-5	14.254	16.218	5.8
5-6	13.031	15.154	4.8
6-7	12.411	14.650	4.2



Cutoff = 10.000 µg/dl
Geo Mean = 6.185
GSD = 1.600
% Above = 15.335

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30177



Cutoff = 10.000 µg/dl
Geo Mean = 6.185
GSD = 1.600
% Above = 15.335
% Below = 84.665

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30177

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30182
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 6.700 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 292.800 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	404.000	292.800
1-2	404.000	292.800
2-3	404.000	292.800
3-4	404.000	292.800
4-5	404.000	292.800
5-6	404.000	292.800
6-7	404.000	292.800

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

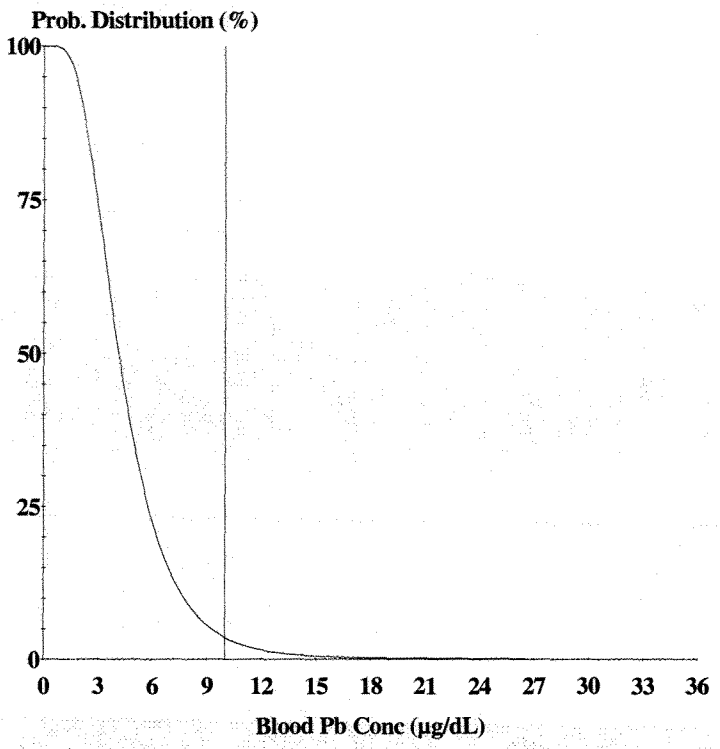
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.022	0.000	0.606
1-2	0.034	0.870	0.000	1.487
2-3	0.062	0.960	0.000	1.571
3-4	0.067	0.933	0.000	1.624
4-5	0.067	0.916	0.000	1.731
5-6	0.093	0.973	0.000	1.844
6-7	0.093	1.059	0.000	1.887

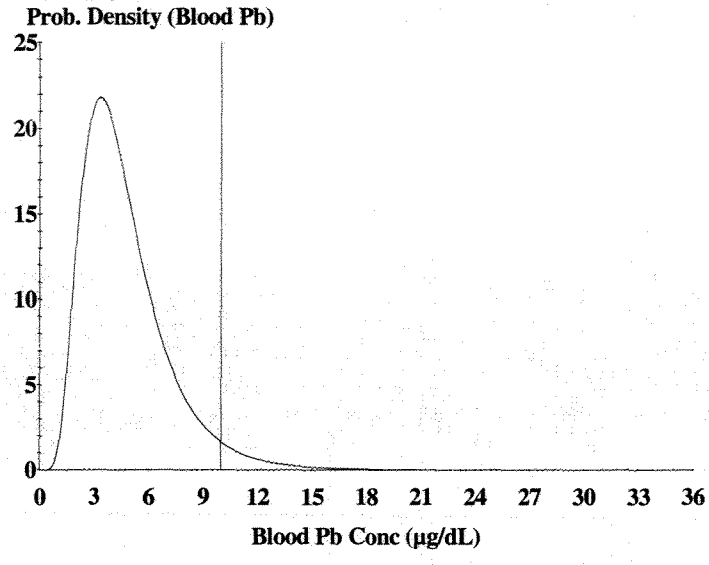
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	7.105	8.754	4.7
1-2	11.073	13.464	5.5
2-3	11.246	13.839	5.1
3-4	11.406	14.029	4.9
4-5	8.682	11.396	4.1
5-6	7.893	10.804	3.4
6-7	7.496	10.535	3.0



Cutoff = 10.000 µg/dl
Geo Mean = 4.341
GSD = 1.600
% Above = 3.789

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30182



Cutoff = 10.000 µg/dl
Geo Mean = 4.341
GSD = 1.600
% Above = 3.789
% Below = 96.211

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30182

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30271
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 658.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	926.000	658.200
1-2	926.000	658.200
2-3	926.000	658.200
3-4	926.000	658.200
4-5	926.000	658.200
5-6	926.000	658.200
6-7	926.000	658.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

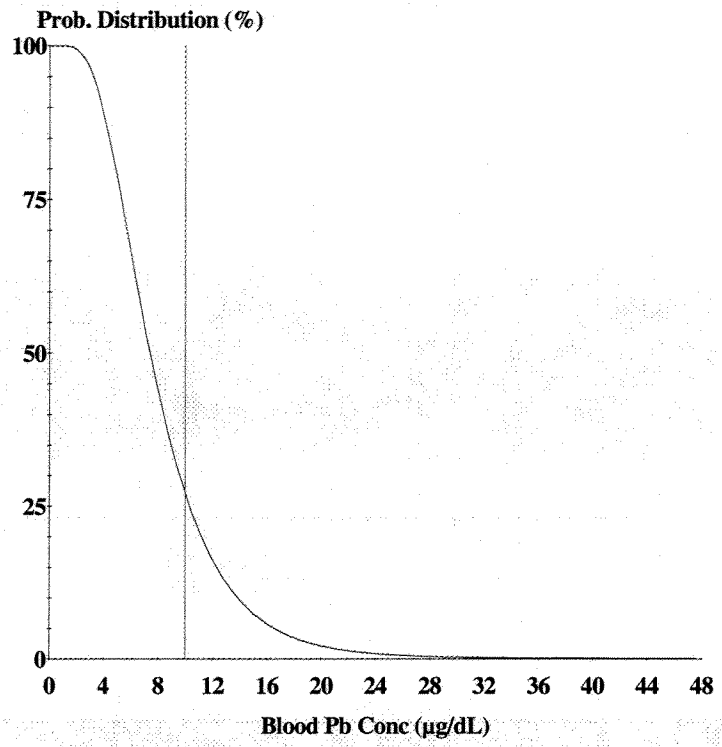
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.937	0.000	0.332
1-2	0.034	0.787	0.000	0.803
2-3	0.062	0.879	0.000	0.858
3-4	0.067	0.863	0.000	0.897
4-5	0.067	0.870	0.000	0.981
5-6	0.093	0.933	0.000	1.056
6-7	0.093	1.021	0.000	1.086

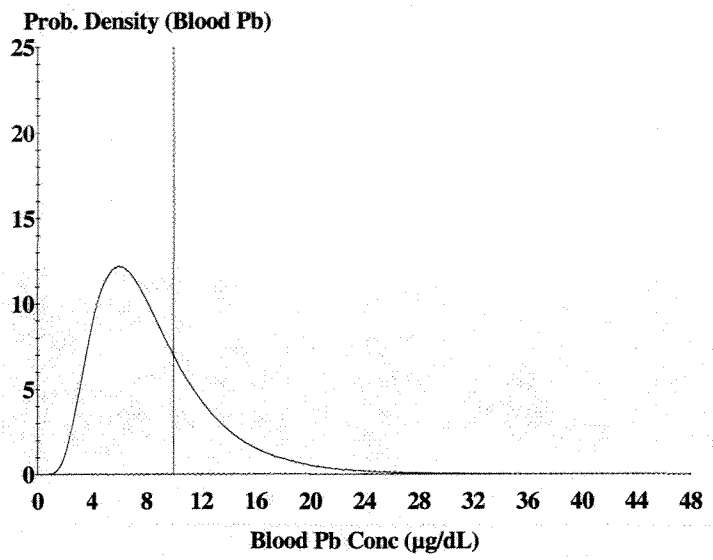
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	14.793	16.083	8.5
1-2	22.747	24.371	9.9
2-3	23.385	25.184	9.3
3-4	23.968	25.794	8.9
4-5	18.719	20.636	7.3
5-6	17.189	19.271	6.1
6-7	16.412	18.613	5.4



Cutoff = 10.000 µg/dl
Geo Mean = 7.772
GSD = 1.600
% Above = 29.589

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30271



Cutoff = 10.000 µg/dl
Geo Mean = 7.772
GSD = 1.600
% Above = 29.589
% Below = 70.411

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30271

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30364
Run Mode: Risk Assessment

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****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 599.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	842.000	599.400
1-2	842.000	599.400
2-3	842.000	599.400
3-4	842.000	599.400
4-5	842.000	599.400
5-6	842.000	599.400
6-7	842.000	599.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

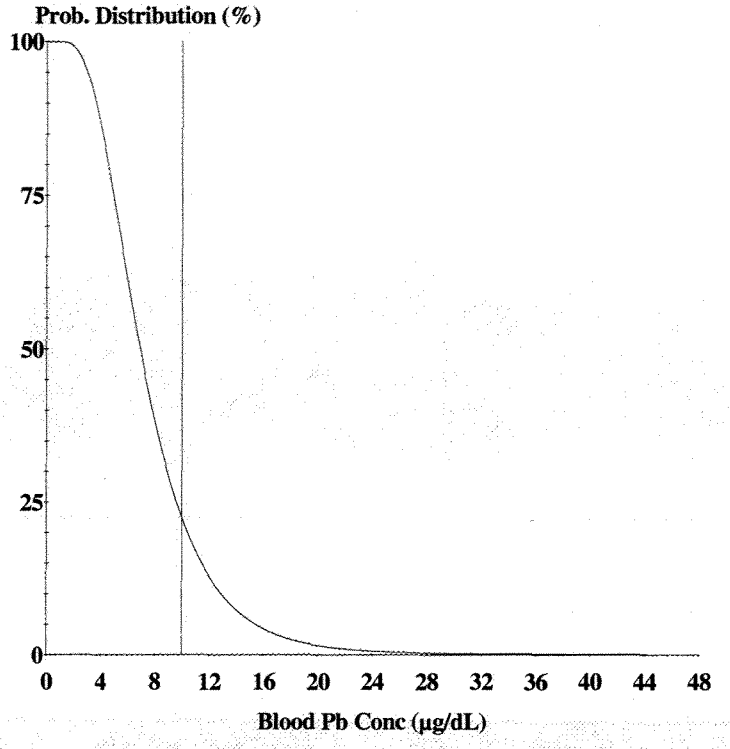
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.950	0.000	0.336
1-2	0.034	0.799	0.000	0.816
2-3	0.062	0.891	0.000	0.871
3-4	0.067	0.874	0.000	0.908
4-5	0.067	0.877	0.000	0.990
5-6	0.093	0.939	0.000	1.063
6-7	0.093	1.028	0.000	1.093

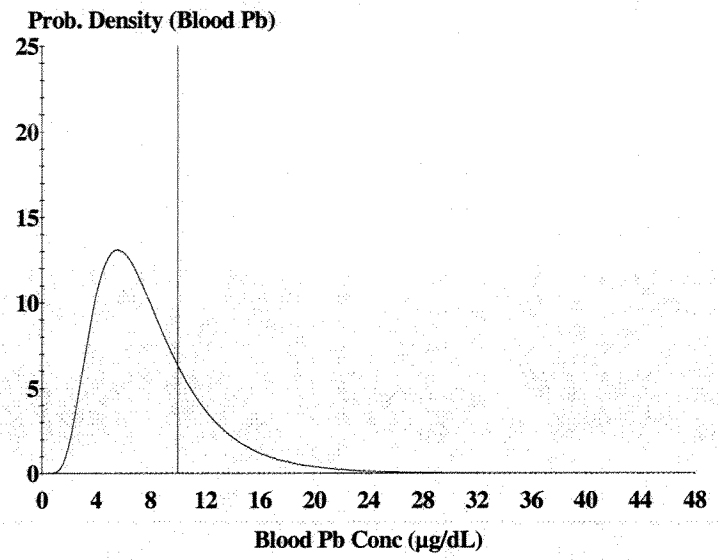
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	13.644	14.951	7.9
1-2	21.027	22.676	9.2
2-3	21.579	23.403	8.6
3-4	22.082	23.931	8.3
4-5	17.181	19.114	6.8
5-6	15.753	17.849	5.7
6-7	15.028	17.242	5.0



Cutoff = 10.000 µg/dl
Geo Mean = 7.230
GSD = 1.600
% Above = 24.510

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30364



Cutoff = 10.000 µg/dl
Geo Mean = 7.230
GSD = 1.600
% Above = 24.510
% Below = 75.490

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30364

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30417
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 759.700 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	1071.000	759.700
1-2	1071.000	759.700
2-3	1071.000	759.700
3-4	1071.000	759.700
4-5	1071.000	759.700
5-6	1071.000	759.700
6-7	1071.000	759.700

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

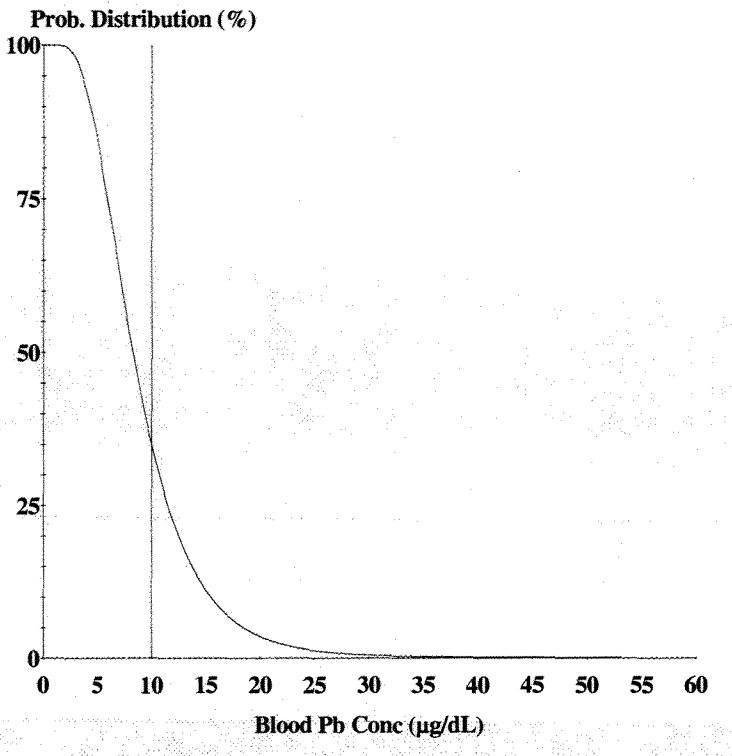
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.916	0.000	0.324
1-2	0.034	0.766	0.000	0.782
2-3	0.062	0.859	0.000	0.839
3-4	0.067	0.845	0.000	0.878
4-5	0.067	0.857	0.000	0.967
5-6	0.093	0.922	0.000	1.043
6-7	0.093	1.010	0.000	1.074

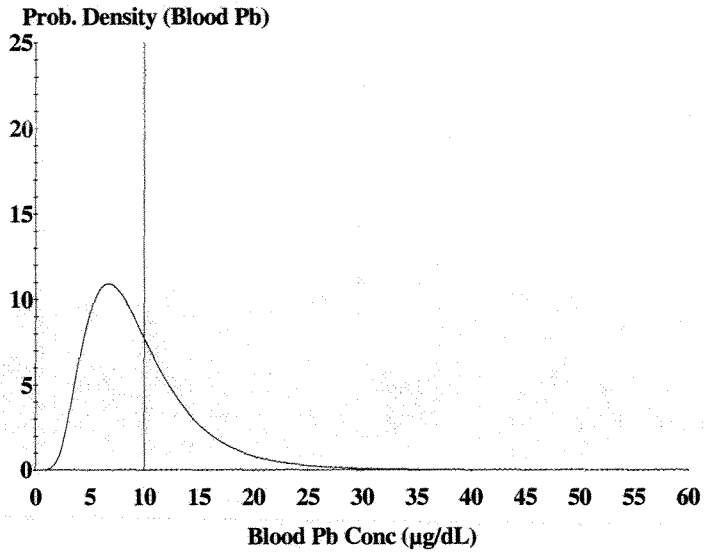
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	16.709	17.971	9.5
1-2	25.601	27.184	11.0
2-3	26.394	28.153	10.3
3-4	27.121	28.911	9.9
4-5	21.315	23.205	8.2
5-6	19.623	21.681	6.9
6-7	18.763	20.941	6.0



Cutoff = 10.000 µg/dl
Geo Mean = 8.675
GSD = 1.600
% Above = 38.118

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30417



Cutoff = 10.000 µg/dl
Geo Mean = 8.675
GSD = 1.600
% Above = 38.118
% Below = 61.882

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30417

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30448
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 19.500 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 546.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	766.000	546.200
1-2	766.000	546.200
2-3	766.000	546.200
3-4	766.000	546.200
4-5	766.000	546.200
5-6	766.000	546.200
6-7	766.000	546.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

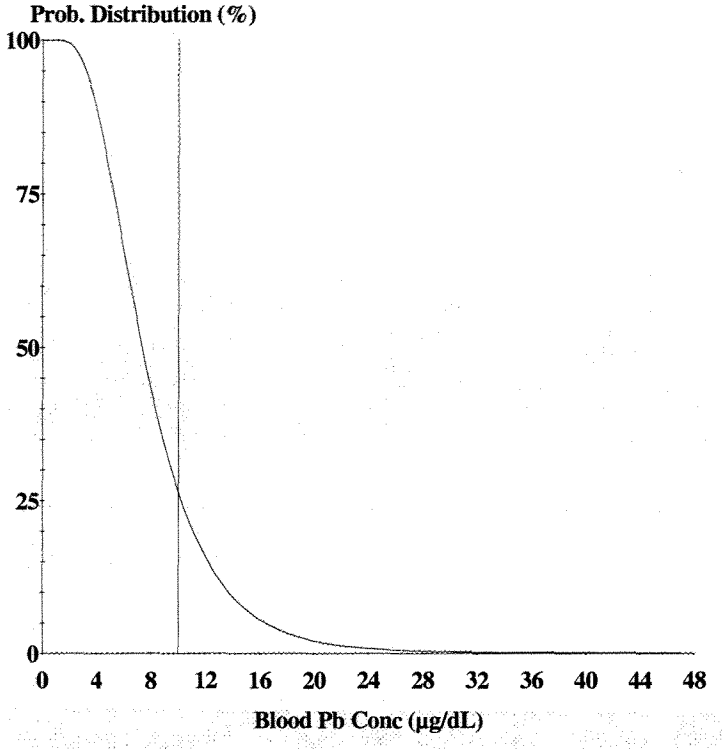
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.949	0.000	1.638
1-2	0.034	0.792	0.000	3.938
2-3	0.062	0.883	0.000	4.204
3-4	0.067	0.866	0.000	4.388
4-5	0.067	0.867	0.000	4.769
5-6	0.093	0.928	0.000	5.120
6-7	0.093	1.015	0.000	5.262

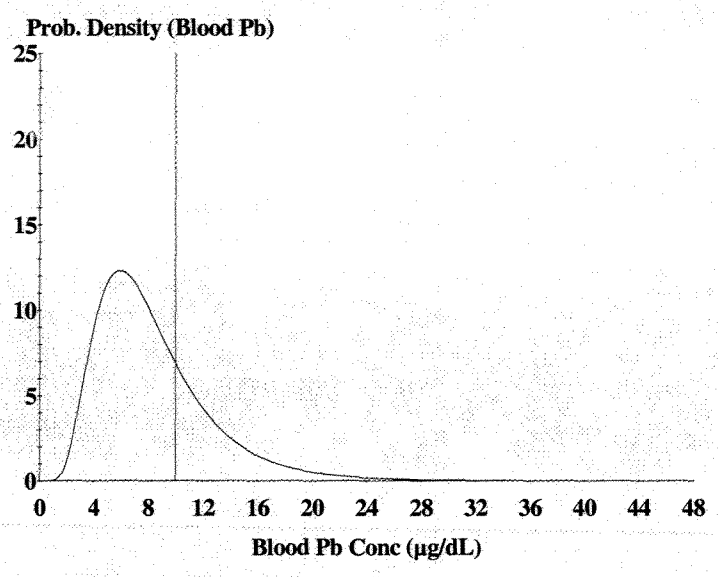
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	12.412	15.020	8.0
1-2	18.958	23.722	9.6
2-3	19.461	24.609	9.1
3-4	19.928	25.249	8.7
4-5	15.461	21.163	7.4
5-6	14.166	20.307	6.4
6-7	13.517	19.888	5.7



Cutoff = 10.000 µg/dl
Geo Mean = 7.690
GSD = 1.600
% Above = 28.811

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30448



Cutoff = 10.000 µg/dl
Geo Mean = 7.690
GSD = 1.600
% Above = 28.811
% Below = 71.189

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30448

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30553
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 0.500 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 513.300 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	719.000	513.300
1-2	719.000	513.300
2-3	719.000	513.300
3-4	719.000	513.300
4-5	719.000	513.300
5-6	719.000	513.300
6-7	719.000	513.300

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

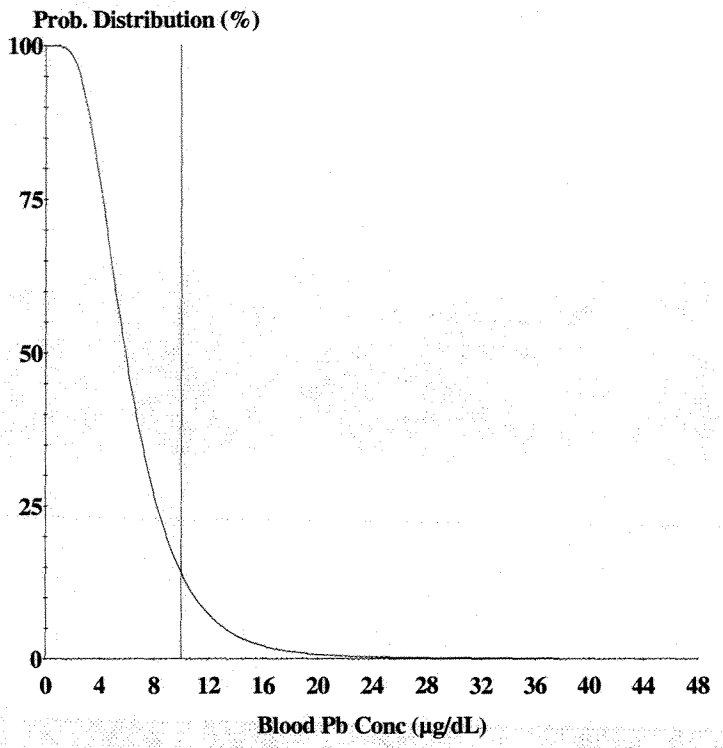
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.972	0.000	0.043
1-2	0.034	0.823	0.000	0.105
2-3	0.062	0.915	0.000	0.112
3-4	0.067	0.894	0.000	0.116
4-5	0.067	0.893	0.000	0.126
5-6	0.093	0.954	0.000	0.135
6-7	0.093	1.042	0.000	0.138

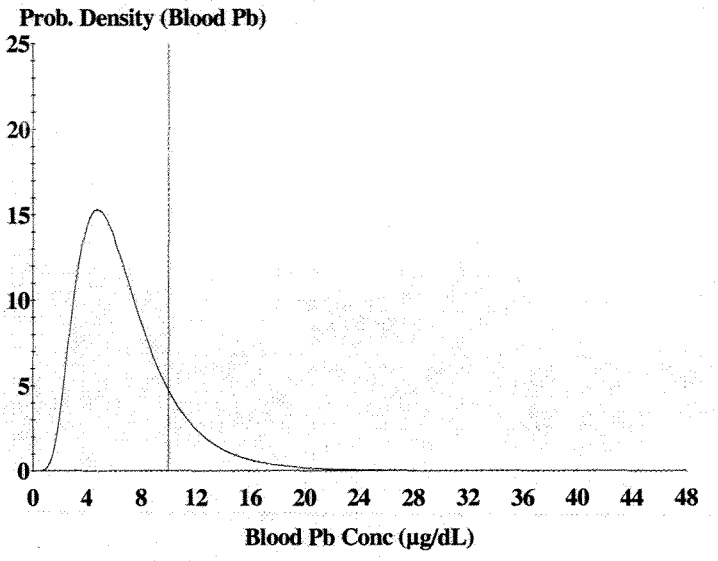
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	11.944	12.981	6.9
1-2	18.519	19.482	8.0
2-3	18.944	20.033	7.4
3-4	19.329	20.407	7.1
4-5	14.948	16.034	5.8
5-6	13.672	14.854	4.8
6-7	13.023	14.297	4.2



Cutoff = 10.000 µg/dl
Geo Mean = 6.184
GSD = 1.600
% Above = 15.328

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30553



Cutoff = 10.000 µg/dl
Geo Mean = 6.184
GSD = 1.600
% Above = 15.328
% Below = 84.672

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30553

LEAD MODEL FOR WINDOWS Version 1.1

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30577
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 358.600 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	498.000	358.600
1-2	498.000	358.600
2-3	498.000	358.600
3-4	498.000	358.600
4-5	498.000	358.600
5-6	498.000	358.600
6-7	498.000	358.600

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

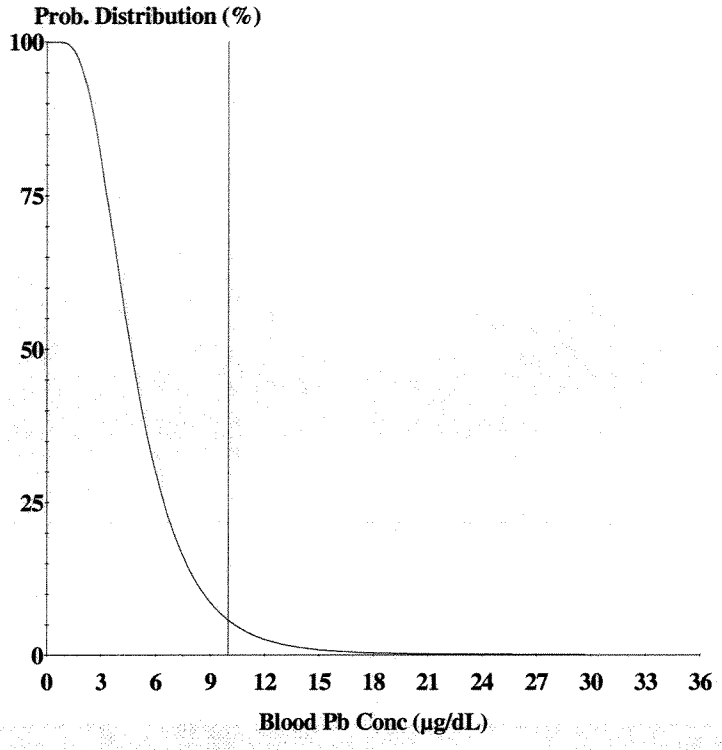
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.007	0.000	0.357
1-2	0.034	0.857	0.000	0.874
2-3	0.062	0.948	0.000	0.925
3-4	0.067	0.922	0.000	0.958
4-5	0.067	0.910	0.000	1.027
5-6	0.093	0.968	0.000	1.096
6-7	0.093	1.055	0.000	1.122

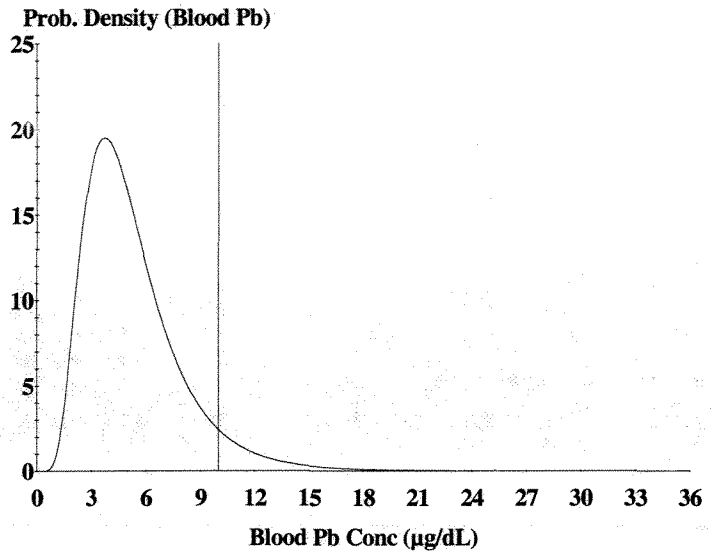
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	8.605	9.990	5.4
1-2	13.399	15.164	6.2
2-3	13.638	15.573	5.8
3-4	13.856	15.803	5.5
4-5	10.598	12.601	4.5
5-6	9.652	11.809	3.8
6-7	9.175	11.445	3.3



Cutoff = 10.000 µg/dl
Geo Mean = 4.851
GSD = 1.600
% Above = 6.186

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30577



Cutoff = 10.000 µg/dl
Geo Mean = 4.851
GSD = 1.600
% Above = 6.186
% Below = 93.814

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30577

LEAD MODEL FOR WINDOWS Version 1.1

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30651
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 649.100 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	913.000	649.100
1-2	913.000	649.100
2-3	913.000	649.100
3-4	913.000	649.100
4-5	913.000	649.100
5-6	913.000	649.100
6-7	913.000	649.100

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

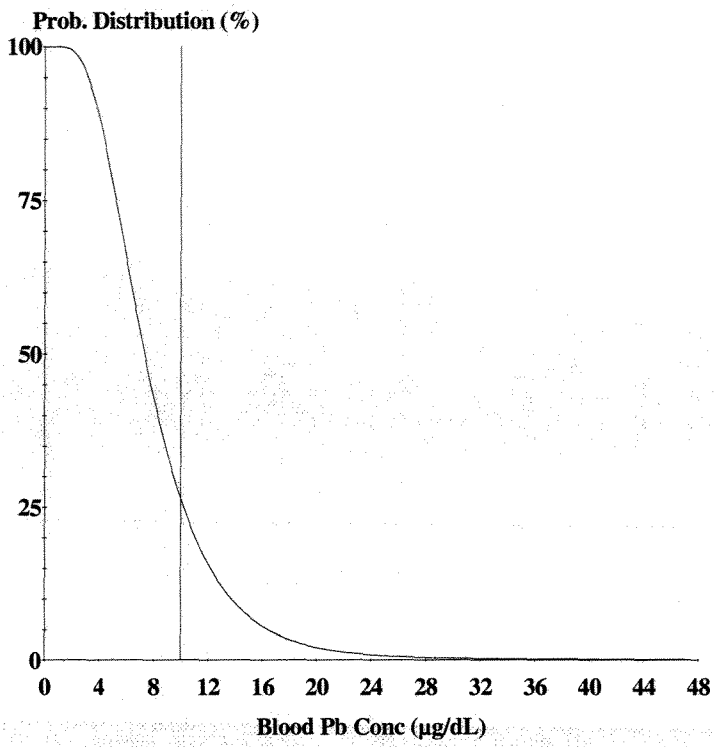
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.939	0.000	0.332
1-2	0.034	0.789	0.000	0.805
2-3	0.062	0.881	0.000	0.860
3-4	0.067	0.865	0.000	0.898
4-5	0.067	0.871	0.000	0.982
5-6	0.093	0.934	0.000	1.057
6-7	0.093	1.022	0.000	1.087

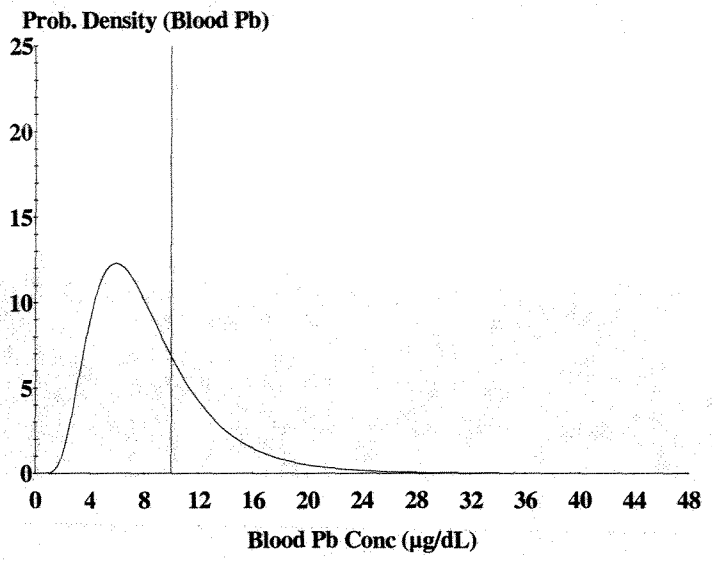
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	14.617	15.910	8.4
1-2	22.484	24.112	9.8
2-3	23.108	24.911	9.2
3-4	23.679	25.509	8.8
4-5	18.482	20.402	7.3
5-6	16.968	19.052	6.1
6-7	16.199	18.402	5.3



Cutoff = 10.000 µg/dl
Geo Mean = 7.689
GSD = 1.600
% Above = 28.805

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30651



Cutoff = 10.000 µg/dl
Geo Mean = 7.689
GSD = 1.600
% Above = 28.805
% Below = 71.195

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30651

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30911
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 4.000 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 613.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	862.000	613.400
1-2	862.000	613.400
2-3	862.000	613.400
3-4	862.000	613.400
4-5	862.000	613.400
5-6	862.000	613.400
6-7	862.000	613.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

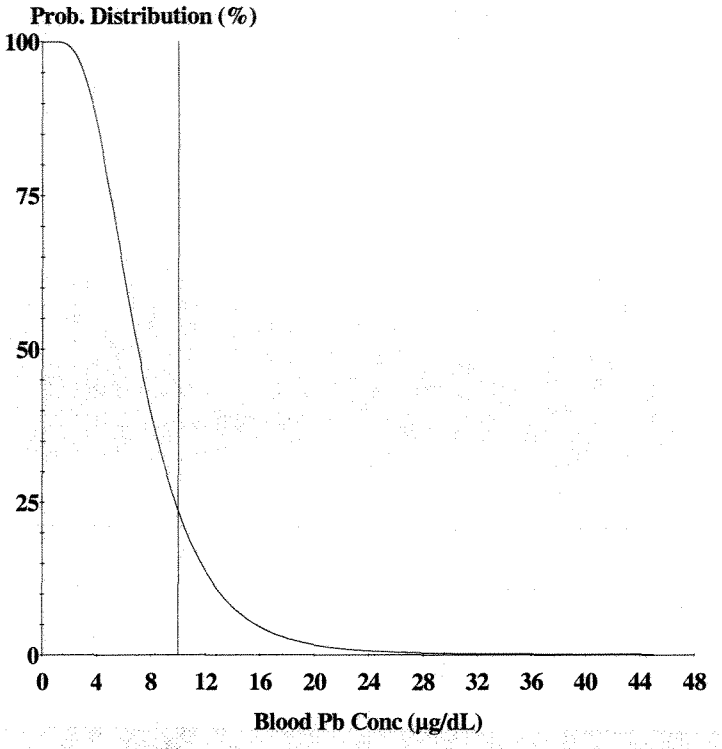
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.947	0.000	0.335
1-2	0.034	0.796	0.000	0.813
2-3	0.062	0.888	0.000	0.868
3-4	0.067	0.871	0.000	0.905
4-5	0.067	0.875	0.000	0.988
5-6	0.093	0.938	0.000	1.061
6-7	0.093	1.026	0.000	1.091

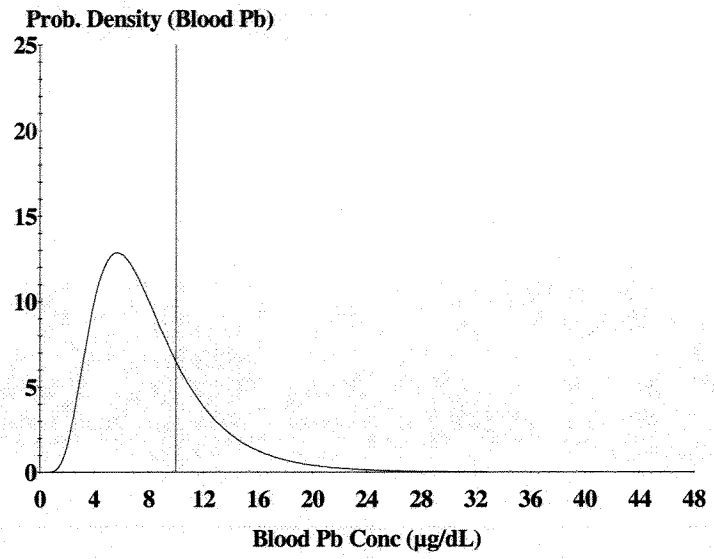
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	13.920	15.224	8.1
1-2	21.441	23.084	9.4
2-3	22.013	23.831	8.8
3-4	22.535	24.379	8.4
4-5	17.549	19.479	6.9
5-6	16.097	18.189	5.8
6-7	15.359	17.570	5.1



Cutoff = 10.000 µg/dl
Geo Mean = 7.361
GSD = 1.600
% Above = 25.721

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30911



Cutoff = 10.000 µg/dl
Geo Mean = 7.361
GSD = 1.600
% Above = 25.721
% Below = 74.279

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30911

LEAD MODEL FOR WINDOWS Version 1.1

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30914
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 12.400 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 738.700 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	1041.000	738.700
1-2	1041.000	738.700
2-3	1041.000	738.700
3-4	1041.000	738.700
4-5	1041.000	738.700
5-6	1041.000	738.700
6-7	1041.000	738.700

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

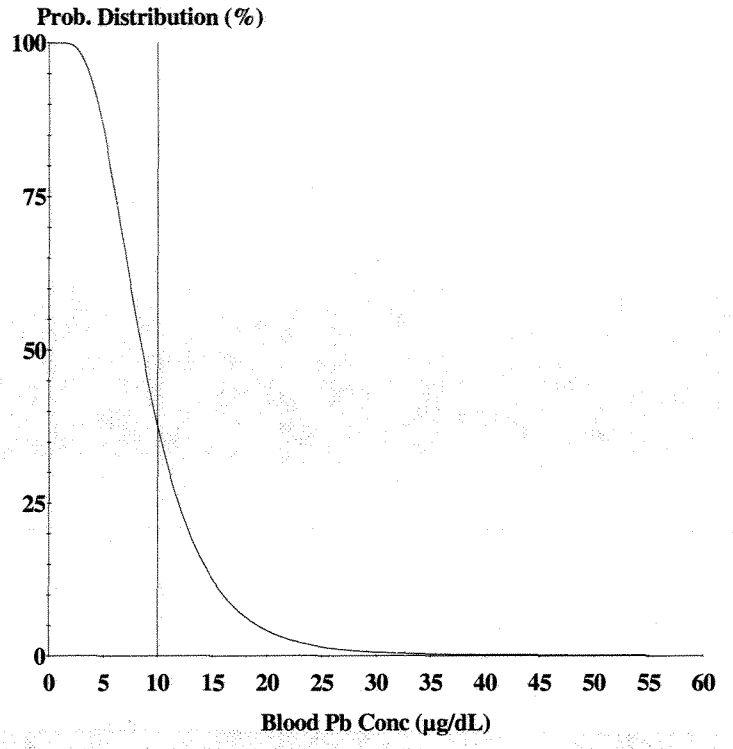
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	0.914	0.000	1.003
1-2	0.034	0.761	0.000	2.408
2-3	0.062	0.853	0.000	2.582
3-4	0.067	0.840	0.000	2.706
4-5	0.067	0.851	0.000	2.976
5-6	0.093	0.915	0.000	3.209
6-7	0.093	1.003	0.000	3.306

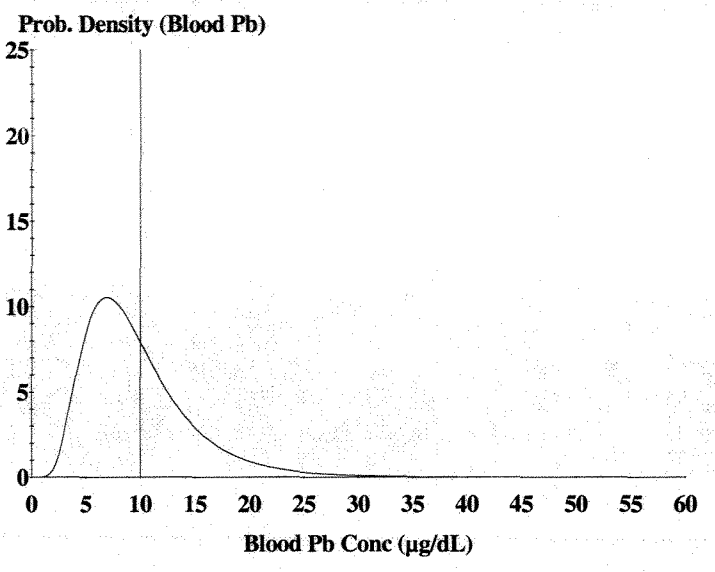
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	16.209	18.148	9.6
1-2	24.718	27.921	11.3
2-3	25.490	28.987	10.6
3-4	26.205	29.818	10.2
4-5	20.572	24.466	8.6
5-6	18.935	23.153	7.3
6-7	18.109	22.511	6.5



Cutoff = 10.000 µg/dl
Geo Mean = 8.979
GSD = 1.600
% Above = 40.934

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30914



Cutoff = 10.000 µg/dl
Geo Mean = 8.979
GSD = 1.600
% Above = 40.934
% Below = 59.066

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30914

LEAD MODEL FOR WINDOWS Version 1.1

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Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 30965
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 0.500 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 224.200 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	306.000	224.200
1-2	306.000	224.200
2-3	306.000	224.200
3-4	306.000	224.200
4-5	306.000	224.200
5-6	306.000	224.200
6-7	306.000	224.200

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

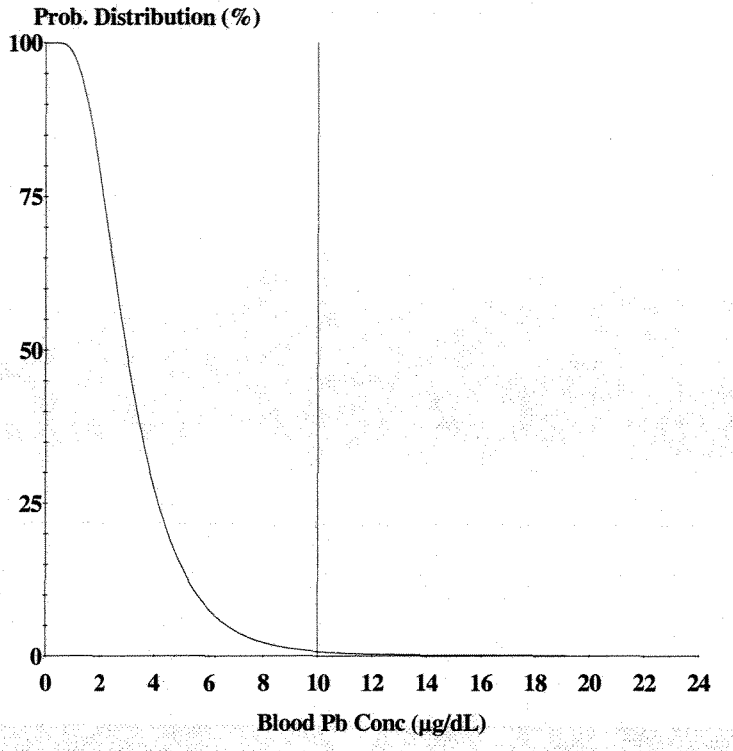
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.048	0.000	0.046
1-2	0.034	0.900	0.000	0.115
2-3	0.062	0.989	0.000	0.121
3-4	0.067	0.957	0.000	0.124
4-5	0.067	0.934	0.000	0.132
5-6	0.093	0.990	0.000	0.140
6-7	0.093	1.076	0.000	0.143

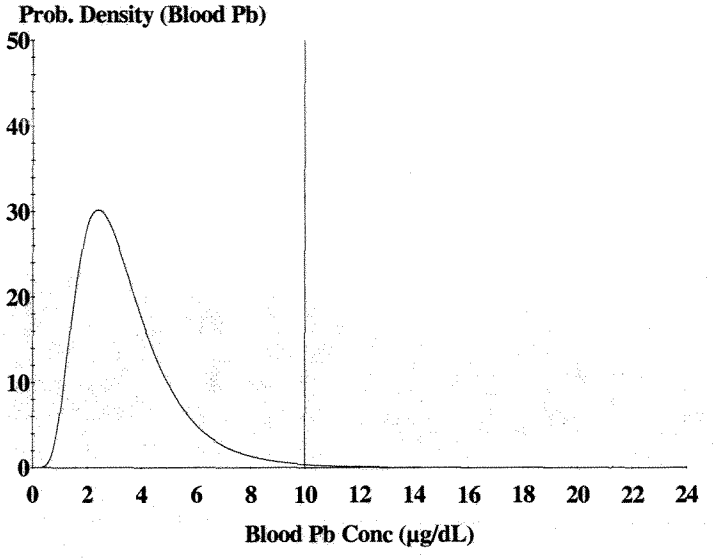
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	5.543	6.658	3.6
1-2	8.716	9.765	4.0
2-3	8.818	9.989	3.7
3-4	8.911	10.059	3.5
4-5	6.740	7.873	2.9
5-6	6.112	7.335	2.4
6-7	5.796	7.108	2.1



Cutoff = 10.000 µg/dl
Geo Mean = 3.132
GSD = 1.600
% Above = 0.675

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30965



Cutoff = 10.000 µg/dl
Geo Mean = 3.132
GSD = 1.600
% Above = 0.675
% Below = 99.325

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 30965

LEAD MODEL FOR WINDOWS Version 1.1

==========

Model Version: 1.1 Build9
User Name: B&V
Date: 7/23/09
Site Name: Washington County Lead District
Operable Unit: Property 31016
Run Mode: Risk Assessment

==========

****** Air ******

Indoor Air Pb Concentration: 30.000 percent of outdoor.
Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m^3/day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m^3)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

****** Diet ******

Age	Diet Intake(µg/day)
.5-1	2.260
1-2	1.960
2-3	2.130
3-4	2.040
4-5	1.950
5-6	2.050
6-7	2.220

****** Drinking Water ******

Water Consumption:

Age	Water (L/day)
.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 12.800 µg Pb/L

****** Soil & Dust ******

Multiple Source Analysis Used
Average multiple source concentration: 270.400 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000
Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	372.000	270.400
1-2	372.000	270.400
2-3	372.000	270.400
3-4	372.000	270.400
4-5	372.000	270.400
5-6	372.000	270.400
6-7	372.000	270.400

****** Alternate Intake ******

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

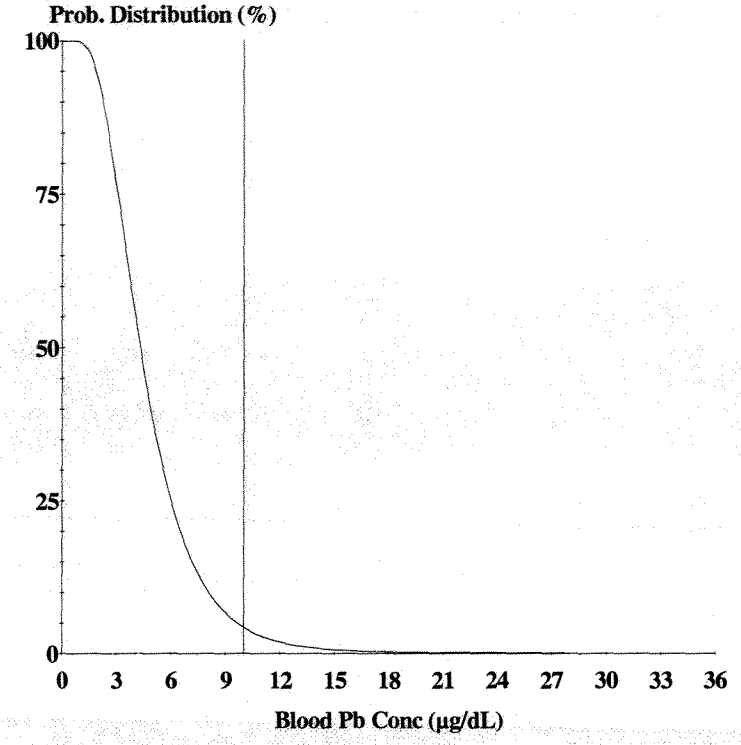
****** Maternal Contribution: Infant Model ******

Maternal Blood Concentration: 1.000 µg Pb/dL

****
CALCULATED BLOOD LEAD AND LEAD UPTAKES:
****

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.022	0.000	1.158
1-2	0.034	0.867	0.000	2.830
2-3	0.062	0.957	0.000	2.989
3-4	0.067	0.929	0.000	3.091
4-5	0.067	0.912	0.000	3.292
5-6	0.093	0.968	0.000	3.506
6-7	0.093	1.054	0.000	3.587

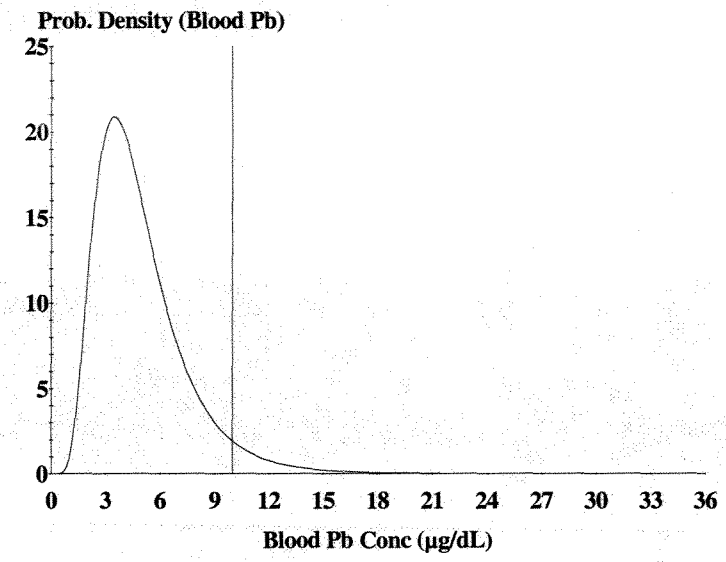
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	6.551	8.752	4.7
1-2	10.170	13.900	5.7
2-3	10.330	14.338	5.3
3-4	10.481	14.568	5.1
4-5	7.967	12.238	4.3
5-6	7.242	11.809	3.7
6-7	6.878	11.613	3.3



Cutoff = 10.000 µg/dl
Geo Mean = 4.529
GSD = 1.600
% Above = 4.599

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 31016



Cutoff = 10.000 µg/dl
Geo Mean = 4.529
GSD = 1.600
% Above = 4.599
% Below = 95.401

Age Range = 0 to 84 months

Run Mode = Research
Comment = Property 31016

Appendix J
Detailed Qualitative Evaluation of COPCs by Media

Table J-1a
Summary of Qualitative Risks to Recreational Users from Exposure to Arsenic in Surface Water
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 0.045 ug/L		> 0.045 to 10 ug/L		> 10 ug/L		Samples > 0.045 ug/L	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	19	0	0	19	100	0	0	19	100
Richwoods	12	0	0	12	100	0	0	12	100
Old Mines	19	0	0	19	100	0	0	19	100

Table J-1b
Summary of Qualitative Risks to Recreational Users from Exposure to Barium in Surface Water
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 200 ug/L		> 200 to 7300 ug/L		> 7300 ug/L		Samples > 200 ug/L	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	19	0	0	19	100	0	0	19	100
Richwoods	12	0	0	12	100	0	0	12	100
Old Mines	19	0	0	18	95	1	5	19	100

Table J-1c
Summary of Qualitative Risks to Recreational Users from Exposure to Manganese in Surface Water
Washington County Lead District RI/S

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 50 ug/L		> 50 to 880 ug/L		> 880 ug/L		Samples > 50 ug/L	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	19	16	84	3	16	0	0	3	16

Table J-1d
Summary of Qualitative Risks to Recreational Users from Exposure to Lead in Surface Water
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 4 ug/L		> 4 to 15 ug/L		> 15 ug/L		Samples > 4 ug/L	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Richwoods	12	7	58	3	25	2	17	5	42
Old Mines	19	11	58	3	16	5	26	8	42

Table J-2a
Summary of Qualitative Risks to Recreational Users from Exposure to Aluminum in Sediment
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 77000 mg/kg		> 77000 to 990000 mg/kg		> 990000 mg/kg		Samples > 77000 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	33	33	100	0	0	0	0	0	0

Table J-2b
Summary of Qualitative Risks to Recreational Users from Exposure to Arsenic in Sediment
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 0.39 mg/kg		> 0.39 to 1.6 mg/kg		> 1.6 mg/kg		Samples > 0.39 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	33	0	0	0	0	33	100	33	100
Richwoods	15	0	0	1	7	14	93	15	100
Old Mines	20	0	0	0	0	20	100	20	100

Table J-2c
Summary of Qualitative Risks to Recreational Users from Exposure to Barium in Sediment
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 15000 mg/kg		> 15000 to 190000 mg/kg		> 190000 mg/kg		Samples > 15000 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	33	13	39	20	61	0	0	20	61
Richwoods	15	4	27	11	73	0	0	11	73
Old Mines	20	12	60	8	40	0	0	8	40

Table J-2d
Summary of Qualitative Risks to Recreational Users from Exposure to Cadmium in Sediment
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 70 mg/kg		> 70 to 800 mg/kg		> 800 mg/kg		Samples > 70 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	33	33	100	0	0	0	0	0	0
Old Mines	20	20	100	0	0	0	0	0	0

Table J-2e
Sumary of Qualitative Risks to Recreationoal Users from Exposure to Cobalt in Sediment
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 23 mg/kg		> 23 to 300 mg/kg		> 300 mg/kg		Samples > 23 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	33	33	100	0	0	0	0	0	0

Table J-2f
Summary of Qualitative Risks to Recreational Users from Exposure to Iron in Sediment
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 55000 mg/kg		> 55000 to 720000 mg/kg		> 720000 mg/kg		Samples > 55000 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	33	33	100	0	0	0	0	0	0

Table J-2g
Summary of Qualitative Risks to Recreational Users from Exposure to Lead in Sediment
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 400 mg/kg		> 400 to 800 mg/kg		> 800 mg/kg		Samples > 400 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	33	22	67	5	15	6	18	11	33
Richwoods	15	7	47	4	27	4	27	8	53
Old Mines	20	15	75	3	15	2	10	5	25

Table J-2h
Summary of Qualitative Risks to Recreational Users from Exposure to Manganese in Sediment
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 1800 mg/kg		> 1800 to 23000 mg/kg		> 23000 mg/kg		Samples > 1800 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	33	33	100	0	0	0	0	0	0

Table J-2i
Summary of Qualitative Risks to Recreational Users from Exposure to Vanadium in Sediment
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 390 mg/kg		> 390 to 5200 mg/kg		> 5200 mg/kg		Samples > 390 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	33	33	100	0	0	0	0	0	0

Table J-3a
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, Construction Workers, ATV Riders and Recreational Users from Exposure to Arsenic in Mine Waste
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 0.39 mg/kg		> 0.39 to 1.6 mg/kg		> 1.6 mg/kg		Samples > 0.39 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	1	0	0	0	0	1	100	1	100
Richwoods	4	0	0	0	0	4	100	4	100
Old Mines	15	0	0	0	0	15	100	15	100

Table J-3b
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, Construction Workers, ATV Riders and Recreational Users from Exposure to Barium in Mine Waste
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 15000 mg/kg		>15000 to 190000 mg/kg		> 190000 mg/kg		Samples > 15000 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	1	1	100	0	0	0	0	0	0
Richwoods	4	4	100	0	0	0	0	0	0
Old Mines	15	15	100	0	0	0	0	0	0

Table J-3c
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, Construction Workers, ATV Riders, and Recreational Users from Exposure to Cadmium in Mine Waste
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 70 mg/kg		> 70 to 800 mg/kg		> 800 mg/kg		Samples > 70 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Old Mines	15	15	100	0	0	0	0	0	0

Table J-3d
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, Construction Workers, ATV Riders and Recreational Users from Exposure to Lead in Mine Waste
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 400 mg/kg		> 400 to 800 mg/kg		> 800 mg/kg		Samples > 400 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	219	50	23	57	26	112	51	169	77
Richwoods	22	4	18	9	41	9	41	18	82
Old Mines	42	4	10	12	29	26	62	38	90

Table J-4a
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, Construction Workers and Recreational Users from Exposure to Arsenic in Historical Soil
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 0.39 mg/kg		> 0.39 to 1.6 mg/kg		> 1.6 mg/kg		Samples > 0.39 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	592	1	0	0	0	591	100	591	100
Richwoods	178	0	0	6	3	172	97	178	100
Old Mines	554	0	0	27	5	527	95	554	100

Table J-4b
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, Construction Workers and Recreational Users from Exposure to Barium in Historical Soil
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 15000 mg/kg		> 15000 to 190000 mg/kg		> 190000 mg/kg		Samples > 15000 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	621	621	100	0	0	0	0	0	0
Richwoods	178	178	100	0	0	0	0	0	0
Old Mines	549	549	100	0	0	0	0	0	0

Table J-4c
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, Construction Workers and Recreational Users from Exposure to Cadmium in Historical Soil
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 70 mg/kg		> 70 to 800 mg/kg		> 800 mg/kg		Samples > 70 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	625	625	100	0	0	0	0	0	0
Richwoods	178	178	100	0	0	0	0	0	0
Old Mines	549	549	100	0	0	0	0	0	0

Table J-4d
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, Construction Workers and Recreational Users from Exposure to Lead in Historical Soil
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 400 mg/kg		> 400 to 800 mg/kg		> 800 mg/kg		Samples > 400 mg/kg	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	950	364	38	267	28	319	34	586	62
Richwoods	190	120	63	39	21	31	16	70	37
Old Mines	560	289	52	157	28	114	20	271	48

Table J-5a
Summary of Qualitative Risks to Residents, Industrial Workers, and Construction Workers from Exposure to Arsenic in Historical Groundwater
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 0.045 ug/L		> 0.045 to 10 ug/L		> 10 ug/L		Samples > 0.045 ug/L	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	433	0	0	433	100	0	0	433	100
Richwoods	348	0	0	348	100	0	0	348	100
Old Mines	969	0	0	968	100	1	0	969	100

Table J-5b
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, and Construction Workers from Exposure to Barium in Historical Groundwater
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 200 ug/L		> 200 to 7300 ug/L		> 7300 ug/L		Samples > 200 ug/L	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	1038	423	41	615	59	0	0	615	59
Richwoods	348	71	20	277	80	0	0	277	80
Old Mines	981	347	35	634	65	0	0	634	65

Table J-5c
Summary of Qualitative Risks to Residents, Industrial Workers and Construction Workers from Exposure to Cadmium in Historical Groundwater
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 5 ug/L		> 5 to 18 ug/L		> 18 ug/L		Samples > 5 ug/L	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	853	849	100	4	0	0	0	4	0
Richwoods	348	348	100	0	0	0	0	0	0
Old Mines	955	954	100	0	0	1	0	1	0

Table J-5d
Summary of Qualitative Risks to Residents, Industrial/Commercial Workers, and Construction Workers from Exposure to Lead in Historical Groundwater
Washington County Lead District RI/FS

Exposure Point	Estimated Number and Percent of Samples Within the Specified Range								
	Number of Samples Evaluated	= 4 ug/L		> 4 to 15 ug/L		> 15 ug/L		Samples > 4 ug/L	
		# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total	# of Samples	% of Total
Potosi	1034	654	63	215	21	166	16	381	37
Richwoods	361	139	39	159	44	63	17	222	61
Old Mines	992	595	60	257	26	140	14	397	40

HRS DOCUMENTATION RECORD COVER SHEET

Name of Site: Washington County Lead District – Potosi Area

EPA ID No.: MON000705023

Contact Persons

EPA Contact : Michelle Quick
U.S. Environmental Protection Agency, Region 7
901 North 5th Street
Kansas City, Kansas 66101
(913) 551-7335

Site Investigation: Missouri Department of Natural Resources
David Gray, Tetra Tech EM Inc.

Documentation Record: Kumud Pyakuryal, Tetra Tech EM Inc.

Pathways, Components, or Threats Not Scored

1) Surface Water Pathway: Because inclusion of the surface water pathway would not change the listing decision, the surface water migration pathway was not scored.

2) Soil Exposure Pathway: Although soil sampling in the area suggests widespread surficial soil contamination, the soil exposure pathway was not scored because it would not impact the listing decision.

3) Air Pathway: Based on the available information, the air migration pathway does not significantly contribute to the site score. In addition, the air migration pathway was not scored because it would not change the listing decision.

HRS DOCUMENTATION RECORD

Name of Site:	Washington County Lead District – Potosi Area
EPA Region:	7
Date Prepared:	September 2007
Street Address of Site*:	Approximately 500 feet east of the intersection of Bell Street and Valley Road, Potosi, Missouri 63664.
City, County, State:	Potosi, Washington, Missouri
General Location in the State:	The site is located in east-central Washington County, Missouri (Ref. 7, pp. 5–6).
Topographic Map:	The location of the site is shown on the Potosi, Missouri, Quadrangle, U.S. Geological Survey, 7.5-Minute Series Topographic Map (Ref. 3, p. 1).
Latitude:	37.9399° North (Ref. 3, p. 1; Ref. 23, p. 1)
Longitude:	90.7724° West (Ref. 3, p. 1; Ref. 23, p. 1)

The latitude and longitude listed above specify the approximate location of the Potosi Public Water Supply (PWS) Well No. 4. Reference 23 depicts the exact location of PWS Well No. 4.

Scores	
Ground Water Migration Pathway	100.00
Surface Water Migration Pathway	0
Soil Exposure Pathway	0
Air Migration Pathway	0
HRS SITE SCORE	**50.00**

Note:

*The street address coordinates, and contaminant locations presented in this HRS documentation record identify the general area of the site's location. They represent one or more locations EPA consider part of the site based on the screening information EPA used to evaluate the site for NPL listing. EPA lists national priorities among the known "releases or threatened releases" of hazardous substances; thus, the focus is on the releases, not precisely delineated boundaries. A site is defined as where a hazardous substance has been "deposited, stored, placed, or otherwise come to be located." Generally, HRS scoring and the subsequent listing of a release merely represent the initial determination that a certain area may need to be addressed under CERCLA. Accordingly, EPA recognizes that the preliminary description of facility boundaries at the time of scoring may be refined as more information is obtained concerning location(s) of contamination.

WORKSHEET FOR COMPUTING HRS SITE SCORE

		S	S^2
1.	Ground Water Migration Pathway Score (S_{gw}) (from Table 3-1, line 13)	100	10,000
2a.	Surface Water Overland/Flood Migration Component (from Table 4-1, line 30)	0.00	
2b.	Ground Water to Surface Water Migration Component (from Table 4-25, line 28)	0.00	
2c.	Surface Water Migration Pathway Score (S_{sw}) Enter the larger of lines 2a and 2b as the pathway score.	0.00	0.00
3.	Soil Exposure Pathway Score (S_s) (from Table 5-1, line 22)	0.00	0.00
4.	Air Migration Pathway Score (S_a) (from Table 6-1, line 12)	0.00	0.00
5.	Total of $S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2$		10,000
6.	**HRS Site Score** Divide the value on line 5 by 4 and take the square root	50.00	

TABLE 3-1.–GROUND WATER MIGRATION PATHWAY SCORESHEET

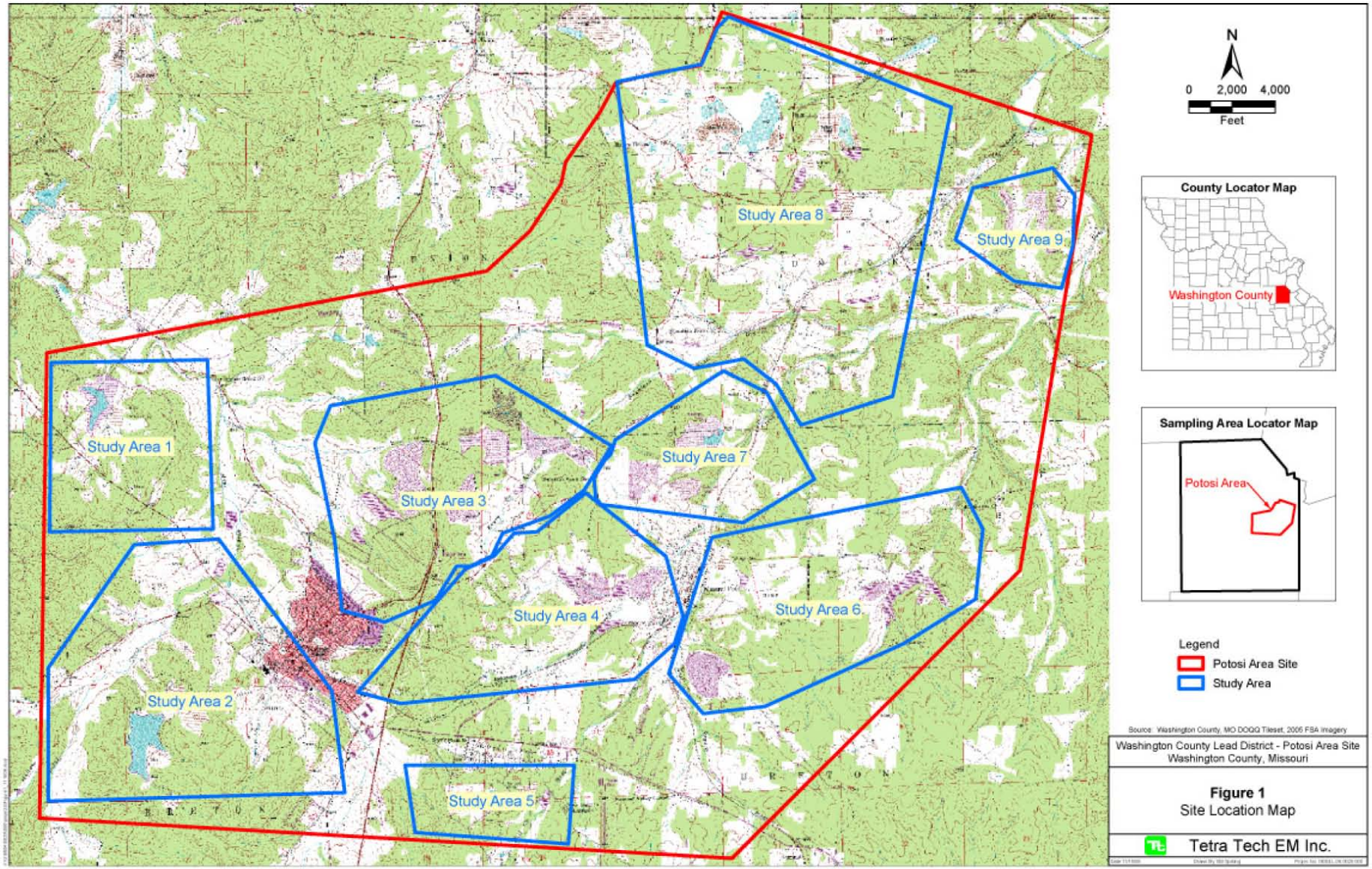
Factor Categories and Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer:		
1. Observed Release:	550	550
2. Potential to Release:		
2a. Containment	10	Not Scored
2b. Net Precipitation	10	Not Scored
2c. Depth to Aquifer	5	Not Scored
2d. Travel Time	35	Not Scored
2e. Potential to Release [lines 2a x (2b + 2c + 2d)]	500	Not Scored
3. Likelihood of Release (higher of lines 1 and 2e)	550	550
Waste Characteristics:		
4. Toxicity/Mobility	a	10,000
5. Hazardous Waste Quantity	a	100
6. Waste Characteristics	100	32
Targets:		
7. Nearest Well	50	50
8. Population:		
8a. Level I Concentrations	b	1,580
8b. Level II Concentrations	b	753
8c. Potential Contamination	b	Not Scored
8d. Population (lines 8a + 8b + 8c)	b	2,333
9. Resources	5	Not Scored
10. Wellhead Protection Area	20	Not Scored
11. Targets (lines 7 + 8d + 9 + 10)	b	2,383
GROUND WATER MIGRATION SOURCE FOR AN AQUIFER		
12. Aquifer Source [(lines 3 x 6 x 11)/82,500][c]	100	100
GROUND WATER MIGRATION PATHWAY SCORE		
13. Pathway Score (S_{gw}), (highest value from line 12 for all aquifers evaluated)[c]	100	100

Notes:
[a] Maximum value applies to waste characteristics category
[b] Maximum value not applicable
[c] Do not round to nearest integer

LIST OF ABBREVIATIONS

DGLS	Division of Geology and Land Survey
E	eastern aquifer
EPA	U.S. Environmental Protection Agency
gpm	gallons per minute
HRS	Hazard Ranking System
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MEGA	Missouri Environmental Geologic Atlas
MDNR	Missouri Department of Natural Resources
NA	not applicable
msl	mean sea level
NA	not applicable
ppb	parts per billion
ppm	parts per million
PWS	public water supply
RSE	Removal Site Evaluation
SQL	sample quantitation limit
U	undetected at or below sample quantitation limit
USBM	U.S. Bureau of Mines
USGS	U.S. Geological Survey
W	western aquifer
XRF	x-ray fluorescence
°F	degrees Fahrenheit
µg/L	micrograms per liter

FIGURE 1.–SITE LOCATION MAP



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SITE SUMMARY

The Washington County Lead District sites consists of known soil, sediment, and ground water contaminated with metals associated with the historical mining district including barium, cadmium, and lead. The site is part of a larger area known as the Washington County Barite district in southeastern Missouri (Ref. 19, p. 4). The district encompasses most of the central and northeastern part of Washington County, and extends a short distance into Jefferson and St. Francois Counties in the vicinity of Big River (Ref. 19, pp. 4, 5). This district was one of the most productive barite producing areas in the world and produced over 11 million short tons of crude barite ore over an 86 year period from 1885 to 1970 (Ref. 19, p. 5). The barite ores in Washington County consist of fragments and lumps of this mineral irregularly scattered within the residual clays at or near the ground surface (Ref. 19 p. 6; 20, pp. 1, 2). It is theorized that the barite rich clays are accumulated insoluble materials derived from long periods of surface weathering and solution of particular horizons of the dolomite bedrock (Ref. 19, p. 6). The well developed fault and fracture system in the district acted as channel-ways for ascending ore-bearing solutions. The solutions then migrated laterally into porous and permeable horizons in the upper Cambrian Potosi and Eminence Dolomites where barite and associated galena were deposited as runs. The soluable dolomites were eroded over time and replaced with clays leaving the ores in the clay. The ore enriched clay is often capped at the surface by thin layers of barren soil and loess (Ref. 19, p. 6).

The earliest documented mining in Washington County was recorded in the early 18th century and focused on the collection and recovery of near surface lead ores (Ref. 20, p. 1). Early mining operations were conducted by farmers to supplement income and usually consisted of hand dug pits advanced into the residuum over the bedrock (Ref. 20, pp. 1, 2). Mining for barite (the ore from which barium is derived) did not occur until after the civil war when barium became economically valuable as a white pigment in paint (Ref. 20, p. 1). In the early 20th century, several thousand people mined barite in Washington County. In 1926, barite mining boomed in Washington County when the mineral was discovered to be useful as a weighting agent in oil drilling mud. Mechanized strip mining did not occur to a great extent until 1924 (Ref. 20, p. 3; 19, p. 7). By the mid 1980s, production started to decline in Washington County due to competition from Nevada and overseas operations (Ref. 20, p. 1).

EPA Region 7 and the State of Missouri Department of Natural Resources (MDNR) are investigating this district to identify impacted residential yards and wells. Ongoing, time-critical removal actions are being conducted at properties where lead in soils or ground water exceeds defined action levels. To date, the investigation has focused around population centers and areas where the heaviest concentrations of former mine sites are located. To aid in the management of data and available resources, the barite district has been split into three areas named Potosi, Richwoods, and Old Mines. This package presents information pertaining to the area named Washington County Lead District-Potosi, which is located near the eastern Ozark Mountains in southeastern Missouri (see Figure 1 of this document).

While the focus of past environmental assessments at the site has been lead in nine study areas (Study Areas 1 through 9) in and around the town of Potosi, the soil and ground water in the area typically contain other contaminants associated with historical mining districts, including arsenic, barium, and cadmium. Analytical results and XRF screening have confirmed significantly elevated levels of lead in ground water and soil. Lead has been detected above a health-based benchmark in domestic and public drinking water wells (Ref. 6, pp. 27–73; Figure 1 of this document). Lead has also been detected above the EPA's action level of 15 parts per billion (ppb) in the underlying aquifers (see Section 3.1.1 of this document).

Large tailings piles associated with past mining activities are visible in the aerial photograph and are annotated on the U.S. Geological Survey 7.5-minute Quadrangle maps reviewed for the Potosi area (Ref.

7, pp. 5–6). However, within the Potosi portion of the Washington County Mining District are hundreds of prospects and areas that have been subject to anthropogenic disturbance of the ore body. The state of Missouri maintains a database known as the inventory of mines, occurrences and prospects (IMOP) that currently has over 21,000 entries of mining and mining related sites in Missouri. In Washington County alone, 1,426 mines or prospects have been identified (Ref. 20, p. 4). Figure 2 of Reference 20 shows the location of the sites in the northeast part of Washington County (Ref. 20, p. 8). See also Reference 29. IMOP locations in the Potosi area are also included in Figure 2 of Reference 13 (Ref. 13, p. 3). The list of 1,426 mines is not comprehensive, and IMOP points increase as further historical documents are reviewed for entry into the database. At this time, it is impractical to characterize each potential source area. The many smaller source areas, not characterized below, may be contributing to the contamination.

Therefore, for much of the ubiquitous ground water contamination in the Mining District, it is not possible to attribute the contamination to any single mining operation. Because of the extensive mining and large number of individual operations, most wells are downgradient of multiple mines (Refs. 18; 20; 29). Even for those wells that are relatively close to a major mining facility, the karst conditions and faults in the water bearing formations result in a maze of channels that make it impossible to document with certainty that the contamination is a result of releases from the nearby mine (Ref. 9, p. 19 and 21). For this reason, EPA has focused the site investigations and the HRS evaluations on the aquifers associated with the population centers in the mining district and not on individual mines.

Although contaminated soils and ground water plume characterization is ongoing, there are estimated 5,498 individuals served by public and private wells in the Potosi area (Ref. 6, p. 32). Hundreds of additional drinking water wells are present in the area (Ref. 6, p. 27).

The area is primarily rural residential with a number of commercial businesses present along state highways (Ref. 7, p. 6). The climate in Washington County, Missouri, is characterized by cool winters and hot summers. The average daily maximum temperature is 88 degrees Fahrenheit (°F) in the summer and 31°F during the winter. The mean annual precipitation is about 39.33 inches, with 47 percent (18.7 inches) falling between April and September (Ref. 5, pp. 2–3).

2.2 SOURCE CHARACTERIZATION

There are many possible sources such as large tailing piles and ponds visible in the aerial photographs and annotated on the U.S. Geological Survey 7.5-minute Quadrangle maps reviewed for the Potosi area (Ref. 3). As discussed in the site summary of this document, earliest documented mining Washington County dates back to the early 18th century. A list of large facilities and operators associated with study areas within the Potosi area is presented in the description of other possible sources, immediately after Section 2.2.1 Hazardous Waste Quantity. However, the ground water wells that met the observed release criteria were used to define the contaminated plume associated with the Potosi site. The wells that met the criteria are listed below and in the table in Section 3.1.1 (observed release section) of this documentation record; the figure included in Reference 13 of this document depicts the wells (Reference 13, p. 2).

2.2.1 SOURCE IDENTIFICATION

The Potosi study area has been divided into two general areas based on ground water flow away from a topographic high transecting the area from north to south, which may be considered a ground water discontinuity. This topographic high roughly follows the path of Highway 21 (Ref. 13, p. 2). East of the divide, ground water flow is generally towards the northeast, while west of the divide it is generally west or northwest (Ref. 13, p. 2). However, because the area is fractured and karst, ground water flow may not always correspond to the regional flow presented in Reference 13 (Ref. 9, pp. 19 and 22).

Figure 2 in Reference 13 presents the IMOP database and the MDNR map of mined lands relative to sampled wells in the area (Ref. 13, pp. 1-2). Some contaminated wells are within identified mined areas; however, many individual prospects are typically present within the mined areas. Because mining in the Potosi area dates to the 1700s, unidentified mines and prospects are also likely to be present beyond those presented in the IMOP database (Refs. 7, pp. 6-10; 13, pp. 1-2). In general, wells in the western aquifer area are largely within or downgradient of either the Horney Brothers Boar's Head Lodge mined area or the Milchem Settle mine. Wells in the eastern area are downgradient of an increasing number of mines the further northeast they are located (Ref. 13, p. 3).

Pervasive metal contamination was documented by laboratory and XRF analyzer data in overlapping study areas identified during previous assessments. In addition, decades of mining in Washington County in general (and the Potosi area in particular), have caused disturbances of ores and exposed the ore to surficial conditions and nearby human and environmental targets (Ref. 6, pp. 17–18, 23–26; 7, pp. 13–20). Given that the targets are downgradient of multiple mining areas, and the karst nature of the contaminated aquifer and high density of contaminated soil areas, it is not possible to identify any specific source(s) of the contamination at this time (Refs. 6, pp. 29, 41–42; 18; 20; 29). Therefore, the source has been identified as a ground water plume with no identifiable source. Although no particular mining related source has been designated for scoring purposes, possible sources are discussed immediately following Section 2.4.2.1.5 of this documentation record.

EPA conducted soil screening and ground water sampling as part of its Removal Site Evaluation (RSE). Because the most immediate health threat is deemed to be contaminated ground water used for drinking, EPA has provided bottled water to residents with private wells contaminated with lead at concentrations above regulatory action levels. Activities associated with an EPA removal action are ongoing at the site, with specific removals undertaken to address soil contamination at time-critical properties that contained lead concentrations above 1,200 mg/kg in areas outside of the drip zone (Ref. 7, p. 23). Of a total of 399 ground water samples collected in support of the EPA RSE, sixty samples (15 percent) contained lead at a concentration above the MCL of 15 micrograms per liter (µg/L). The concentration of lead ranged from 15.1 to 110 µg/L in these samples (Ref 7, pp. 20).

Name of source: - **Potosi Area Ground Water Plume (with no single identified source)**
Number of source: - 1
Source Type: - Other
Description and Location of Source (with reference to a map of the site): Figure 1
The ground water plume source encompasses an area of lead contaminated ground water including a public supply well and numerous private domestic drinking water supply wells in the Potosi area (Refs. 13, p. 2; 18). This source was divided into two aquifers based whether the ground water evidence is located in the eastern sub-aquifer (E) or western sub-aquifer (W) to which the Potosi area has been divided (Ref. 13, p. 2).

The Washington County Lead District - Potosi Area site consists of soil and ground water contamination by lead, which is a contaminant associated with local historical mining. Analytical results and XRF screening have identified elevated levels of lead in ground water and soil; however, the extent of contamination has not been fully characterized. The nine study areas, which the RSE focused on, are centered on and around historical, large-scale mining operations. Areas encompassed by the site include a small town, rural residential sections, and a number of commercial business facilities located generally along the state highways. Large tailings piles associated with past lead and barite mining are visible in aerial photographs and are annotated on the Potosi, Missouri U.S. Geological Survey 7.5-minute quadrangle maps (Ref. 3; 7, p. 6).

Between 2004 and 2006, MDNR completed Pre-Comprehensive Environmental Response and Liability Information System (Pre-CERCLIS) screening assessment, abbreviated Preliminary Assessment, and combined Site Inspection/Removal Assessment at the site. Combination MDNR investigations indicated that an area-wide soil contamination was associated with local mining operations (Ref. 6, pp. 16). Of a total of 427 residential ground water well samples collected by MDNR in support of its investigations, 92 (21.5 percent) contained lead above the MCL of 15 µg/L. Lead in these samples ranged from 15.1 to 92.8 µg/L (Ref. 7, pp. 10–11, 21–22).

EPA and the State of Missouri have performed extensive studies characterizing the extent of the ground water lead contamination but have found no single mining facility to which lead released to any major target well can be individually attributed.

Elevated levels of lead have been detected in the Potosi Public Water Supply (PWS) wells on multiple occasions during the last few years. PWS Well # 4, which serves greater than 700 individuals, has had detections ranging from 4.8 µg/L to 73.5 µg/L (Ref. 24, p. 1; 21, pp. 2–5).

2.2.2 HAZARDOUS SUBSTANCES ASSOCIATED WITH THE SOURCE

The ground water plume source hazardous substances are those hazardous substances for which an observed release has been established within the contaminated ground water plume being evaluated for the scoring purposes underneath the site. The primary contaminant of concern associated with the site used for scoring purposes is lead. The results presented below from historical ground water sampling events suggest elevated levels of lead at the site (Ref. 21, pp. 2–19).

Background Levels:

Public Supply Well

For much of the ubiquitous ground water contamination in the site area, it is not possible to attribute the contamination to any single mining operation. Because of the extensive mining and large number of

individual operations, most wells are downgradient of multiple mines (Refs. 13, p. 3). Even for those wells that are relatively close to a major mining facility, the karst conditions and faults in the water bearing formations result in a maze of channels that make it impossible to document with certainty that the contamination is a result of releases from the nearby mine (Ref. 9, pp. 19 and 22).

The City of Potosi's Well # 5 is a suitable background well for PWS Well # 4, the release well, based on its similarity in construction, size and location in the aquifer (Ref. 25). Chemical analyses for PWS Well # 5 from 1994 to 2004 indicate that dissolved lead was not detected. In contrast, the City's Well # 4, located about 1 mile north-northeast has contained dissolved lead concentrations between 4.8 and 12.6 µg/L. A sample from PWS Well # 4, collected in December 2003 contained a total lead concentration of 73.5 µg/L (Refs. 22, pp. 2-10; 21, pp. 2-19; 23).

PWS Well # 4, drilled in 1961, has a surface elevation of 1,017 feet above mean sea level (msl) and reached a total depth of 1,020 feet bgs (-3 feet msl). PWS Well # 5, with a surface elevation of 1056 feet above msl had a total depth of 1,425 feet bgs, or -367 feet msl. Both of these wells area completed in the St. Francois aquifer; however, Well # 5 penetrated approximately 300 feet into the Lamotte sandstone, while Well # 4, terminated at the transition zone between the Bonneterre to the Lamotte (Ref. 25, p. 9–10).

Comparison of the well logs for PWS Wells # 4 and # 5 indicate that the Ozark Aquifer—made up of the Gasconade (including the Gunther Sandstone), Eminence, and Potosi dolomites—have been cased off, with casing ending near the top of the Bonneterre formation (Ref. 25, pp. 2–8). PWS Well # 4 is cased to a depth of 661 feet bgs (356 feet above msl), while PWS Well # 5 is cased to 792 feet bgs (264 feet above msl). As is typical of the area, the wells are open hole below the cased depth, rather than being screened over the producing interval (Reg. 25, p. 9–10).

Both wells are completed in the St. Francois Aquifer, which is comprised of the Bonneterre formation and Lamotte Sandstone. The top of the Bonneterre was encountered at a depth of 785 feet bgs in PWS Well # 5 (271 feet above msl). In PWS Well # 5, it was encountered at 640 feet bgs (377 feet above msl) or about 100 feet lower in than in PWS Well # 4. The well logs indicate that PWS Well # 5 produces from the Bonneterre and the underlying Lamotte, while PWS Well # 4 reached its total depth in the sandy dolomite transition zone just above the top of the Lamotte Sandstone. No significant differences are apparent in the rock descriptions for the two wells that would suggest a higher concentration of naturally occurring elements (Ref. 25, pp. 9–10). In addition, its upgradient location indicates that PWS Well # 5 is properly located background for comparative purposes.

TABLE 1

SOURCE BACKGROUND SAMPLES FOR MUNICIPAL WELL SAMPLES

Laboratory Sample Number	Well ID	Dates Collected	Dissolved Lead Concentration (µg/L)	SQL (µg/L)	Well Depth	References
94-E273	Potosi PWS Well # 5	07/05/1994	5 U	5	1,425 ft bgs -369 ft msl	13, p. 2; 22, pp. 2–10; 25, pp. 10; 23; 31, pp. 1, 2, 4, 5, 7, 10
97-H553		08/12/1997	< 4	2.5		
0115288		01/16/2001	< 4	2.5		
0340895		12/17/2003	1 U	1		

Notes:

*	The SQLs provided in this table are referred to as practical quantitation limits. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are sometimes called the sample quantitation limit (Ref. 31).
ID	Identification
µg/L	micrograms per liter
U	The analyte was not detected at or above the reporting limit
ft bgs	feet below ground surface
ft msl	feet above mean sea level

Private Wells

Based on the obtained analytical results in support of MDNR's environmental services program, historically lead has not been detected in known sampling data at PWS Well # 5. It was not detected in all of the four sampling dates listed in Table 1 above (Ref. 22, pp. 2–10). The samples listed in Table 2 were collected from private wells and serve as background for comparison to other private wells at the site. Background residential wells were selected from an area that is generally upgradient and away from the contaminated wells (Refs. 18). Although well construction information is not available, residential wells that met the observed release criteria are expected to draw drinking water from the same aquifer interval (Ref. 13, p. 2 and 18).

TABLE 2

SOURCE BACKGROUND SAMPLES FOR PRIVATE WELL SAMPLES

Laboratory Sample ID and Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	References
2882-131 20905 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 823–824; 13, p. 2; 15, p. 79; 16, pp. 4, 6–7, 24; 17, p. 23; 18; 26
2882-135 20854 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 811–812; 13, p. 2; 15, p. 79; 16, pp. 4, 6–7, 25; 17, p. 23; 18; 26
2882-136 20760 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	115	Ref. 7, pp. 703–704; 13, p. 2; 15, p. 79; 16, pp. 4, 6–7, 25; 17, p. 23; 18; 26
2882-138 20842 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	108	Ref. 7, pp. 799–800; 13, p. 2; 15, p. 79; 16, pp. 4, 6–7, 26; 17, p. 23; 18; 26
2882-142 20843 (E)	01/07/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 801–802; 13; 15, p. 80; 16, pp. 4, 6–7, 27; 17, p. 24; 18; 26
2882-148 20906 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 825–826; 13, p. 2; 15, p. 81; 16, pp. 4, 6–7, 28; 17, p. 24; 18; 26, p. 1; 26
2882-150 20853 (E)	01/07/06	Lead (dissolved)	1.00 U	1.0	260	Ref. 7, pp. 809–810; 13, p. 2; 15, p. 81; 16, pp. 4, 6–7, 29; 17, p. 24; 18; 26

Laboratory Sample ID and Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	References
2882-159 20821 (E)	01/09/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 787–788; 13, p. 2; 15, p. 82; 16, pp. 4, 6–7, 31; 17, p. 24; 18; 26
2901-106 20789 (E)	01/20/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 737–738, 1293, 1295–1296, 1306; 13, p. 2; 15, p. 91; 17, p. 30; 18; 26
2901-112 20524 (E)	01/20/06	Lead (total)	1.00 U	1.0	90	Ref. 7, pp. 581–582, 1294–1296, 1307; 13, p. 2; 15, p. 92; 17, p. 30; 18; 26
2901-113 20677 (E)	01/20/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 599–600, 1294–1296, 1308; 13, p. 2; 15, p. 92; 17, p. 30; 18; 26
2901-116 20690 (E)	01/20/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 607–608, 1294–1296, 1308; 13, p. 2; 15, p. 92; 17, p. 31; 18; 26
2901-117 20823 (E)	01/21/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 791–792, 1294–1296, 1309; 13, p. 2; 15, p. 92; 17, p. 31; 18; 26
2901-118 20822 (E)	01/21/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 789–790, 1294–1296, 1309; 13, p. 2; 15, p. 92; 17, p. 31; 18; 26
2801-112 20355 (W)	10/12/05	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 139–140, 1128, 1145; 13, p. 2; 15, p. 8; 17, p. 5; 18; 26
2915-121 20964 (W)	02/06/06	Lead (dissolved)	1.00 U	1.0	120	Ref. 7, pp. 387–388, 1315, 1333; 13, p. 2; 15, p. 100; 17, p. 34; 18; 26
		Lead (total)	1.00 U	1.0		
2915-122 20974 (W)	02/07/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 403–404, 1315-1317, 1333; 13, p. 2; 15, p. 100; 17, p. 34; 18; 26
		Lead (total)	1.00 U	1.0		
2915-112 20973 (W)	02/01/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 401–402, 1315–1317, 1331; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26
2915-113 20960 (W)	02/01/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 379–380, 1315–1317, 1331; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26
2915-117 20963 (W)	02/03/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 385–386, 1315–1317, 1332; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26
2915-119 20957 (W)	02/06/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 373–374, 1315–1317, 1332; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26

Notes:

* The SQLs provided in this table are referred to as reporting limits. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are sometimes called the sample quantitation limit.

ID Identification
µg/L micrograms per liter
U The analyte was not detected at or above the reporting limit
1 refers to HRS subaquifer
E eastern aquifer
W western aquifer

ft bgs feet below ground surface

Contaminated Samples

The ground water pathway source hazardous substances are those hazardous substances for which an observed release was established within the evaluated aquifer per current EPA convention for the ground water migration pathway. Lead was detected in PWS Well # 4 on five known occasions since 1997. As noted earlier, of a total of 427 residential ground water well samples collected by MDNR in support of its investigations in the Potosi area, 92 (21.5 percent) contained lead above the MCL of 15 µg/L. Because the most immediate health threat is deemed to be contaminated ground water used for drinking, EPA has provided bottled water to residents with private wells contaminated with lead at concentrations above regulatory action levels. Three-hundred ninety-nine ground water samples were collected in support of the EPA RSE. Sixty samples (15 percent) contained lead at a concentration above the MCL of 15 µg/L. The concentration of lead ranged from 15.1 to 110 µg/L in these samples (Ref 7, pp. 20). EPA RSE analytical data collected from residential wells is presented in Section 3.0 of this document. The samples presented below provide results for wells that roughly delineate Eastern and Western plumes associated with the Potosi area.

Laboratory Sample Number (Aquifer)[1]	Sample Location	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Reference
0417143 (W)	Potosi PWS Well #4	02/13/2004	Lead (dissolved)	12.6	1.0	1,020 ft bgs -3 ft msl	Ref. 13, p. 2; 21, pp. 1–3; 23; 25, p. 9; 31, pp. 1–3
0340897 (W)	Potosi PWS Well #4	12/17/2003	Lead (total)	73.5	1.0	1,020 ft bgs -3 ft msl	Ref. 13, p. 2; 21, pp. 1, 4–5; 23; 25, p. 9; 31, pp. 1–2, 4
0115287 (W)	Potosi PWS Well #4	01/16/2001	Lead (dissolved)	4.8	2.5	1,020 ft bgs -3 ft msl	Ref. 13, p. 2; 21, pp. 1, 12–13; 23; 25, p. 9; 31, pp. 1–2, 4
0041537 (W)	Potosi PWS Well #4	12/27/2000	Lead (dissolved)	7.7	2.5	1,020 ft bgs -3 ft msl	Ref. 13, p. 2; 21, pp. 1, 14–15; 23; 25, p. 9; 31, pp. 1–3, 5
97-H552 (W)	Potosi PWS Well #4	08/12/1997	Lead (dissolved)	8.0	2.5	1,020 ft bgs -3 ft msl	Ref. 13, p. 2; 21, pp. 1, 18–19; 23; 25, p. 9; 31, pp. 1–2, 6
2801-216 (W)	20291	10/12/05	Lead (total)	14.80 J	1.0	Unknown	Ref. 7 pp. 133–134, 1128, 1131–1133, 1153; 13, p. 2; 15, p. 12; 17, p. 1; 18; 26

Laboratory Sample Number (Aquifer)[1]	Sample Location	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Reference
2823-137 (W)	20455	10/26/05	Lead (total)	26.8	1.0	Unknown	Ref. 7 pp. 341–342, 1172, 1174–1175, 1193; 13, p. 2; 15, p. 27; 17, p. 8; 18; 26
2832-140 (W)	20494	11/19/05	Lead (total)	19.5 J	1.0	150	Ref. 7 pp. 345–346, 1203, 1205–1206, 1226; 13, p. 2; 15, p. 41; 17, p. 14; 18; 26
2832-119 (W)	20410	11/16/05	Lead (total)	21.8 J	1.0	Unknown	Ref. 7 pp. 179–180, 1203, 1205–1207, 1220; 13, p. 2; 15, p. 38; 17, p. 13; 18; 26
2873-132 (W)	20607	12/19/05	Lead (total)	16.7	1.0	200	Ref. 7 pp. 499–500, 1270–1271, 1284; 13, p. 2; 15, p. 66; 17, p. 28; 18; 26
2801-110 (W)	20272	10/10/05	Lead (dissolved)	8.17J[1]	1.0	500	Ref. 7 pp. 241–242, 1128, 1131–1133, 1144; 13, p. 2; 15, p. 8; 17, p. 5; 18; 26
2832-144 (W)	20386	11/19/05	Lead (total)	2.60 J[1]	1.0	165	Ref. 7 pp. 315–316, 1203, 1205–1207, 1227; 13, p. 2; 15, p. 41; 17, p. 14; 18; 26
2873-127 (W)	20603	12/17/05	Lead (total)	32.4	1.0	172	Ref. 7 pp. 493–494, 1270–1271, 1283; 13, p. 2; 15, p. 65; 17, p. 27; 18; 26
2915-103 (W)	20422	02/01/06	Lead (total)	10.3 J[2]	1.0	Unknown	Ref. 7 pp. 417–418, 1314, 1316–1317, 1328; 13, p. 2; 15, p. 98; 17, p. 33; 18; 26
2915-107 (W)	20965	02/01/06	Lead (total)	6.57 J[2]	1.0	130	Ref. 7 pp. 389–390, 1315–1317, 1329; 13, p. 2; 15, p. 98; 17, p. 33; 18; 26

Laboratory Sample Number (Aquifer)[1]	Sample Location	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Reference
2873-103 (E)	20613	12/14/05	Lead (total)	110	1.0	200-300	Ref. 7 pp. 505–506, 1269, 1271, 1277; 13, p. 2; 15, p. 62; 17, p. 26; 18; 26
2863-157 (E)	20594	12/07/05	Lead (total)	83.9	1.0	250	Ref. 7 pp. 1059–1060, 1237, 1239–1240, 1262; 13, p. 2; 15, p. 57; 17, p. 19; 18; 26
2863-155 (E)	20459	12/06/05	Lead (total)	73.7	1.0	100	Ref. 7 pp. 961–962, 1237, 1239–1240, 1262; 13, p. 2; 15, p. 57; 17, p. 19; 18; 26
2873-141 (E)	20396	12/20/05	Lead (total)	25.2 J	1.0	Unknown	Ref. 7 pp. 533–534, 1270–1271, 1286; 13, p. 2; 15, p. 67; 17, p. 28; 18; 26
2801-268 (E)	20432	10/20/05	Lead (total)	16.4	1.0	Unknown	Ref. 7 pp. 437–438, 1128, 1131–1133, 1166; 13, p. 2; 15, p. 18; 17, p. 3; 18; 26
2863-132 (E)	20445	12/05/05	Lead (total)	10.8 J[1]	1.0	90-110	Ref. 7 pp. 957–958,1237, 1239–1240, 1256; 13, p. 2; 15, p. 54; 17, p. 18; 18; 26
2863-137 (E)	20625	12/03/05	Lead (total)	18.9 J[1]	1.0	Unknown	Ref. 7 pp. 1071–1072, 1237, 1239–1240, 1257; 13, p. 2; 15, p. 55; 17, p. 18; 18; 26
2863-128 (E)	20572	12/05/05	Lead (total)	3.80 J[1]	1.0	140	Ref. 7 pp. 1101–1102, 1237, 1239–1240, 1255; 13, p. 2; 15, p. 53; 17, p. 18; 18; 26

Laboratory Sample Number (Aquifer)[1]	Sample Location	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Reference
2832-150 (E)	20587	11/21/05	Lead (total)	7.43 J[1]	1.0	120	Ref. 7 pp. 567–568, 1203, 1205–1207, 1228; 13, p. 2; 15, p. 42; 17, p. 14; 18; 26
2901-108 (E)	20701	01/20/06	Lead (total)	25.2 J[1]	1.0	Unknown	Ref. 7 pp. 627–628, 1293, 1295–1269, 1306; 13, p. 2; 15, p. 91; 17, p. 30; 18; 26

Notes:

* The SQLs provided in this table are referred to as practical quantitation limit. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are sometimes called the sample quantitation limit.

J Although the analytes in question have been positively identified in the samples, the quantitation is an estimate due to the serial dilution percent differences being above the control limits. The reported results may be biased low by as much as 19, 79, 16, and 18% in samples 2801-216, 2832-140, 2832-119, and 2801-141, respectively.

J[1] The analyte has been positively identified in the sample; however the reported value is an estimate due to serial percent dilution being above the control limit. The reported value may be biased low. Therefore, even if the value was adjusted to a higher value to compensate for the bias, it would still meet the observed release criteria.

J[2] The analyte has been positively identified in the sample; however the reported value is an estimate due to the peak width at 10% peak height exceeding 0.80 amu in the ICP-MS tune. The reported value may be biased low. Therefore, even if the value was adjusted to a higher value to compensate for the bias, it would still meet the observed release criteria.

PWS Public Water Supply
µg/L micrograms per liter
1 refers to HRS subaquifer
E eastern aquifer
W western aquifer
ft bgs feet below ground surface
ft msl feet above mean sea level

2.2.3 HAZARDOUS SUBSTANCES AVAILABLE TO A PATHWAY

Containment Description	Containment Factor Value	Reference
Gas release to air	Not Scored	NA
Particulate release to air	Not Scored	NA
The containment factor value for the ground water migration pathway was evaluated for "All Sources" for evidence of hazardous substance migration from source area (i.e, source area includes source and any associated containment structures). The source is a ground water plume. The plume is defined as an area of contamination released to ground water and detected in ground water samples. Applicable containment factor value was determined based on existing analytical evidence of hazardous substances in ground water samples from private and public wells. Therefore, the highest ground water migration pathway containment factor value of 10 was assigned to Source Number 1 as	10	Ref. 7, pp. 5–31; 21, pp. 9–19

Containment Description	Containment Factor Value	Reference
specified in Table 3-2 of the HRS Rule (Ref. 1, Section 3.1.2.1).		
Release via overland migration and/or flood.	Not Scored	NA

2.2.4 HAZARDOUS WASTE QUANTITY

2.4.2.1.1 Hazardous Constituent Quantity

The information available is not sufficient to adequately determine Tier A, as required in Section 2.4.2.1.1 of the HRS Rule. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier B, hazardous wastestream quantity (Ref. 1, Section 2.4.2.1.1).

Hazardous Constituent Quantity Value: NE

2.4.2.1.2 Hazardous Wastestream Quantity

The information available is not sufficient to adequately determine Tier B, as required in Section 2.4.2.1.2 of the HRS Rule. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier C, volume (Ref. 1, Section 2.4.2.1.2).

Hazardous Wastestream Quantity Value: NE

2.4.2.1.3 Volume

The information available is not sufficient to evaluate Tier B, the volume will be evaluated under Tier C. For the migration pathways, the source is assigned a value for volume using the appropriate Tier C equation from Table 2-5 (Ref. 1, Section 2.4.2.1.3). Because the extent of the ground water plume is unknown, the volume for the ground water plume will be designated as unknown, but contaminated ground water samples are present, so it is clear the quantity is greater than zero.

Volume: >0

2.4.2.1.4 Area

The area measure (Tier D) is not evaluated for source type “other” (Ref. 1, Table 2-5).

Area: 0

2.4.2.1.5 Source Hazardous Waste Quantity Value

Highest assigned value assigned from Table 2-5: >0

SUMMARY OF SOURCE DESCRIPTIONS

Source No.	Source Hazardous Waste Quantity Value	Source Hazardous Constituent Quantity Complete? (Y/N)	Containment Factor Value by Pathway				
			Ground Water (GW) (Table 3-2)	Surface Water (SW)		Air	
				Overland/flood (Table 4-2)	GW to SW (Table 3-2)	Gas (Table 6-3)	Particulate (Table 6-9)
1	>0	No	10	Not Scored	Not Scored	Not Scored	Not Scored

Other Possible Sources

Lead mining in the Potosi area of Washington County has a long history dating back to the early 1700s. Potosi is located in the region know as the Old Lead Belt, where large-scale mining occurred in Washington, Madison, and St. Francois Counties. The lead mineralization occurs in fractured bedrock and in red clay residuum derived chiefly from the Cambrian Potosi and Eminence dolomites. Miners recovered lead from both residuum and shafts that extended into the bedrock. Continuous mining in the Potosi area began at Mine Renault—just north of Potosi—in 1721 with the use of slave labor. Mine Renault produced as much as 1,500 pounds of ore per day. Many small mines opened and closed during this time, with continuous production for the first 20 years and intermittent production until 1799. Miners, to this point, had recovered galena by hand mining and cleaning from shallow pits less than 10 feet deep. It was not until 1799, when Moses Austin sank a shaft to a depth to 80 feet and erected a reverberatory furnace that lead mining began to develop on a larger scale. This mining process continued until shortly after 1900. Beginning in 1904, the Point Mining and Milling Company used a steam shovel and wet-process mill. Around 1924, the Eagle-Picher Company and National Pigments and Chemical Company began production by stripping residuum and processing the material in a washer and jig plant. Mining operations shifted from hand mining to mechanized during this period and continued until 1942 (Ref. 7, pp. 5–14).

After 1942, lead was mined by removing residuum with mechanized shovels and front-end loaders. The residuum was loaded into trucks and hauled to washers, where clay was removed with high-pressure water in a rotary breaker. This procedure separated the rock by breaking it into smaller pieces. The mined material was then passed through log washers that removed even more clay and separated the mined material. Finally, the material was passed through trammels and onto jigs, where material was separated by weight. Finally, lead and barite were separated from any remaining waste rock. Barite mining did not occur in the Potosi area until post-Civil War time. Before this time, barite was placed in waste piles when lead was recovered. Barite mineralization occurs mostly in red clay residuum, also derived from the Cambrian Potosi and Eminence dolomites. The clay residuum is generally located several inches to 3 or 4 feet below barren soil overburden. The average thickness of the residuum ranges from a few feet to more than 30 feet. Barite mining started because it was found to be a long-lasting white pigment. Later, barite was discovered to be a useful weighting agent in oil drilling. During the 1900s, Washington County was the world leader in barite production. Many of the large mining operations reworked land that experienced hand mining for lead or barite. Considerable ore was usually left behind between pits and shafts (Ref. 7, p. 7).

MDNR has identified mined areas from three sources—U.S. Geological Survey 7.5-minute topographic maps, maps developed by MDNR's Division of Geology and Land Survey (DGLS), and digital orthophoto quarter quadrangles (DOQQs). MDNR used all three methods to identify potential areas of concern, in conjunction with data points from the IMOP database. Various entities or private citizens

have owned, operated, and managed mines and associated lands in the Potosi area. MDNR used the IMOP database and U.S. Bureau of Mines (USBM) production records housed at DGLS to compile information on mine owners and operators in the Potosi area; the results are summarized in the following list. In addition, IMOP information indicates it is probable that unrecorded early lead mining occurred in all study areas (Ref. 7, pp. 5–14).

The operational background on study areas presented below was obtained from the 2006 Removal Site Evaluation (RSE) report (Ref. 7, pp. 5–14).

Study Area 1 (Western Sub-Aquifer)	NL Baroid Gun Club Mine operated by Hornsey Brothers — 1955–1960 (IMOP). IMOP notes that another washer operated in this area pre-1940.
Study Area 2 (Western Sub-Aquifer)	NL Baroid Boar's Head Lodge Mine, operated by Hornsey Brothers — about 1938–1967 (IMOP). American Lead and Baryta also operated within this sample area, but information on dates of operation is not available at this time. IMOP notes that another washer operated in this area pre-1940. IMOP also notes that several lead operations opened pre-1892, and one opened in 1840. State Mine Inspectors reports for 1899–1902 and 1907–1908 include production information for sites in this area.

Study Area 3 (Western and Eastern Sub-Aquifer)	Milchem Keyes Branch Mine — 1974–1978, closed by 1979 (USBM production records). Milchem Settle Mine — 1961–1971, closed late 1971 (USBM production records). Dresser — 1942–1970 (IMOP). Magnet Cove also operated within this sample area, but information on dates of operation is not available at this time.
Study Area 4 (Western and Eastern Sub-Aquifer)	Dresser Potosi — 1942–1978 (IMOP and USBM production records); some production may be as Magcobar. Milchem — 1957–1980 (USBM production records). In addition, Magnet Cove, Pfizer, American Lead and Baryta, J.E. Carter Mining Company, Mineral Point Mining Company, C.K. Williams, Ozark Mineral Company, Carter Brothers, and Eversole and McClay operated within this sample area, but information on dates of operation is unavailable at this time.
Study Area 5 (Eastern Sub-Aquifer)	Ozark Mining Company, Ozark Minerals Company, Fredericktown Lead Company Dempsey mine — 1952–1962, originally opened 1806 (IMOP); may be earlier mining listed in USBM production records. Lead mining was noted pre-1835 (IMOP).
Study Area 6 (Eastern Sub-Aquifer)	Pfizer — 1943–1954 (IMOP). Imco Apex — 1950–1964 (IMOP and USBM production records), 1980–1981 (USBM production records). In addition, Cordia Mining Company, Carter Mining Company, C.K. Williams, and W.H. Walton operated within this sample area, but information on dates of operation is not available at this time.
Study Area 7 (Eastern Sub-Aquifer)	Pfizer Mineral Point — 1957–1972 (IMOP and USBM production records). C.K. Williams operated within this sample area, but information on dates of operation is not available at this time.
Study Area 8 (Eastern Sub-Aquifer)	NL Baroid Fountain Farm Mine and Plant — 1945–1959 (Mine and Plant) (IMOP), 1968–1980 (Plant) (USBM production records). This plant likely operated between 1959 and 1968; however, reporting in the USBM production records makes this determination difficult without further study of the data. NL Baroid Bottom Diggings — 1945–1959 (USBM production records). NL Baroid Cadet — 1957, 1968 to an undetermined date (IMOP). Terrace Mining Company 1947–1961 (USBM production records). Superior Wolf — 1950 to an undetermined date (IMOP). AW Wood AW Wood Mine — 1958–1964 (IMOP). Dresser Mine #7 (also Wolf) — 1950 to an undetermined date (IMOP). In addition, Buckman Laboratories, Magcobar, White Brothers, and Degonia operated in this sample area, but information on dates of operation is not available at this time.

	The State Mine Inspectors report for 1891–1903 includes production figures for American Lead and Baryta and Shibboleth Lead Mining Company (opened 1811).
Study Area 9 (Eastern Sub-Aquifer)	Hornsey Brothers Cadet Mine — 1966–1979 (IMOP and USBM production records). Production is noted for another Hornsey operation in 1943 (USBM production records).

MDNR's search of USBM production data indicated other sites based in the Potosi area, but the information was not specific enough to locate the mines without further investigation. Those sites are listed as follows:

- AW Wood — 1957, 1964–1967, likely the AW Wood mine in SA-8.
- Hornsey Brothers — 1942–1958, 1972.
- Magnet Cove — 1957–1965.
- Dresser Mineral Point — 1975–1981.

MDNR conducted investigative actions, including screening, at the site starting in and around June 2005. During its investigation, MDNR attempted to obtain access to all residential properties on or near the heavily mined areas in each study area to assess the extent of lead contamination in surface soils and ground water. Soil and ground water samples were collected at each property accessed for analysis of lead. Soil screening was conducted in accordance with the guidelines established in the Superfund Lead-Contaminated Residential Sites Handbook (Ref. 7, p. 10). Of the 358 properties screened by MDNR, 170 residences (47 percent) contained lead between 400 mg/kg and 1,200 mg/kg outside the drip zone, and 64 residences (18 percent) contained lead above 1,200 mg/kg outside the drip zone (Ref. 7, pp. 5–14).

These data are based on the highest average XRF reading for lead within the area screened at each residential property. A total of 427 ground water samples were collected during field activities associated with the MDNR investigations. Ninety-two samples (22 percent) contained lead above the regulatory action level and Maximum Contaminant Limit Goals (MCLG) on SCMD of 15 micrograms per liter (µg/L) (Ref. 6, p. 41).

Finally, an additional source type not included above but associated with the site is "contaminated soil." As described before, a major focus of the work accomplished to date at the site includes screening of soils at residential properties for lead and performing time critical removal actions at residences where lead exceeds action levels (Refs. 6, pp. 70-73; 7, p. 19). The source of the elevated lead in the contaminated soils is not clear and may be a results of previous small hand-worked mines near the residential properties, imported contaminated soil used as fill, houses built on lands previously strip mined by mining operations, airborne dispersion of contaminants from nearby haul roads, or runoff from mine process areas or tailings piles. In some cases, homes were built on or are located near tailings piles. Although these areas of contaminated soil were not included as listed source areas in this section of the documentation record, they are present throughout the Potosi area (Ref. 6, pp. 70-73).

3.0 GROUND WATER MIGRATION PATHWAY

3.0.1 GENERAL CONSIDERATIONS

The site is located in the Salem Plateau Groundwater Province (Ref. 9, p. 6; 3) of the Ozark Plateaus geophysical province (Ref. 11, p. 1). The uppermost bedrock strata at the site are typically the Cambrian-age Eminence and Potosi dolomites; however, small remnants of the overlying Ordovician-age Gasconade and Roubidoux are present at higher elevations (Ref. 14; Figure 1 of this document). Ground water flows away from a topographic high that generally bisects the Potosi study area from north to south. This topographic high may be an aquifer discontinuity; therefore, to be conservative, the Ozark Aquifer will be evaluated both as one aquifer and as two separate sub-aquifers. For the HRS scoring purposes, the area west of the topographic high that bisects the site is referred to as Western Aquifer and the area east of the topographic high is referred to as Eastern Aquifer (Ref. 13, p. 2). The further downgradient a well is located relative to this topographic high, the more likely it is that ground water has been impacted by multiple source areas (Ref. 13, p. 3). The associated targets are also assigned as associated with Eastern or Western aquifer. The scoresheets at the front of this document reflect the single aquifer approach, and the scoresheets in Appendix A reflect the pathway score of each sub-aquifer.

The Eminence and Potosi form the Ozark Aquifer, which also includes younger Ordovician rocks such as the Gasconade and Roubidoux, which have largely been eroded in this area. Underlying the Ozark aquifer are the Derby-Doe Run Dolomite and Davis Formation these units have lower permeability and are referred to as the St. Francois confining unit. The St. Francois aquifer underlies these less permeable units and consists of the Bonneterre Dolomite and Lamotte Sandstones (Ref. 9, pp. 8, 14, 19; 14).

Bedrock in the area has been faulted upward and the overlying Ordovician-age strata have largely been removed through erosion. The Washington County soil survey indicates that solution weathering along structural features has created numerous springs, fens, caves, and related karst features in Washington County, with over 75 caves and 100 springs documented in the county (Ref. 30, p. 5). Surface and subsurface weathering of the carbonate rocks of the Ozark aquifer in the Salem Plateau has created numerous karst ground water recharge features such as sinkholes and losing streams that allow very rapid movement of water into the subsurface (Ref. 9, p. 19).

<u>Ground Water Migration Pathway Description</u>

<u>Aquifer/Stratum Name #1: Ozark Aquifer—Eminence Dolomite</u>

The Eminence dolomite varies from about 150 to 200 feet thick in Washington County and has a gradational contact with the underlying Potosi dolomite (Ref. 9, pp. 9–10). The Eminence Dolomite consists of medium- to coarsely-crystalline dolomite with mostly nodular chert (Ref. 9, p. 9–10). The Eminence is karst dolomite, and based on the HRS Section 3.1.2.4 (Table 3-6), it is assigned a hydraulic conductivity of $1x10^{-2}$ centimeters per second (cm/sec).

<u>Aquifer/Stratum Name #2: Ozark Aquifer—Potosi Dolomite</u>

The Potosi Dolomite consists of medium- to finely-crystalline dolomite with frequent quartz druse "mineral blossoms" (Ref. 10, pp. 6–7). The Potosi dolomite is approximately 250 feet thick in the area and is the major host rock for the barite and lead ores in Washington County (Ref. 14, p. 1). Dissolution, mineralization, and secondary alteration are common along structural features and associated fractures (Ref. 14, sheet 1). Based on Section 3.1.2.4 of the HRS (Table 3-6), the karst Potosi dolomite is assigned a hydraulic conductivity of $1x10^{-2}$ cm/sec.

The Eminence and Potosi dolomites are the lowermost units of the Ozark Aquifer system. Because the same hydraulic conductivity is assigned to these karst dolomites, it is reasonable to combine the units as a single aquifer.

Missouri Environmental Geologic Atlas (MEGA) documents the presence of karst topography in the Potosi area, revealing cave features, losing streams, sinkholes, and springs in the site area (Ref. 13, p. 2). Because dissolution and fracturing have created abundant secondary porosity in the Ozark aquifer, hydraulic properties are heterogeneous and anisotropic. Horizontal hydraulic conductivities typically range from 0.001 to 86 feet per day (ft/day), and yields range from 50 to 100 gallons per minute (gpm) (Ref. 8, p. 49). Permeable residuum coupled with karst features produce complex ground water conditions, with rapid percolation of waters to the bedrock aquifers (Ref. 8, pp. 5, 49). In south-central Missouri, municipal wells completed at depths of 950 to 1,500 feet below ground surface in the Ozark Aquifer have shown increased turbidity following rainstorms, illustrating the rapidity of the recharge from the surface (Ref. 8, p. 49). In addition, mine shafts or tunnels and deep exploratory borings could also act as conduits for ground water flow both vertically and laterally. Because of these features, ground water flow may not always follow topography or, for deeper ground water, the generally northwestern regional flow towards the Meramec River (Ref. 8, p. 45).

The Ozark aquifer is unconfined in the area, and the potentiometric surface generally mimics topography (Ref. 8, pp. 44, 45, 49). The Ozark aquifer is recharged nearly everywhere by meteoric waters, and ground water generally flows laterally from higher elevations to discharge points along springs and seeps. Ground water divides in the Ozark aquifer generally correspond to topographic divides. A major topographic ridge extends across southern Missouri, forming a regional ground water discontinuity, with water in the deep part of the aquifer flowing away from the ridge and discharging into major rivers. In Washington County, this deep ground water flow would be northwest towards the Meramec River (Ref. 8, p. 45).

Ground water is the principal source of public and private water supplies in the site area. The Ozark Aquifer is the most important aquifer in the Salem Plateau (Ref. 9, p. 19). Of the Ozark aquifer formations, the Potosi dolomite is the most prolific and reliable aquifer. In its outcrop area or where it is near surface, such as in the site area, the Potosi dolomite generally produces water at about 20 to 30 gallons per minute (Ref. 9, p. 19). The upper part of the Eminence yields 50 to 75 gpm, principally due to secondary porosity developed along fractures (Ref. 9, p. 20).

MDNR well logs for 11 private wells in the area indicate that the Eminence is the uppermost bedrock, and the rest indicate the uppermost bedrock is the Potosi. All 11 reached their total depth in the Potosi (Ref. 13, pp.8–9). Review of the well logs for the deep City of Potosi and Mineral Point public wells, indicates the base of the Ozark aquifer occurs at depths ranging from 190 to 555 feet bgs (445 to 720 feet above msl). These public wells are producing from the lower St. Francois aquifer and have cased-off the Ozark aquifer.

MDNR records for 204 certified wells (wells drilled after about 1986) in the Potosi site indicate that—with one exception—the domestic wells range in depth from 100 to 425 feet. Based on the depth to the base of the Ozark aquifer in the public wells, it is likely that all but the one certified private wells are producing from the Ozark Aquifer. Static water levels for the certified wells range from 10 feet below ground surface (bgs) to 60 feet bgs, but are typically between 20 and 40 feet bgs (Ref. 13, p. 4–8). Certified well records indicated test yields ranged from 10 to 60 gpm, with most yields of about 20 or 30 gpm. The wells identified in the MDNR well records are shown on Figures 1 and 2 in Reference 13 (Ref. 13, p. 2-3).

St. Francois Confining Unit—Elvin Group

Underlying the Ozark Aquifer is the St. Francois confining unit. This consists of the Derby-Doerun Dolomite and the Davis Formation, which together form the Elvins Group (Ref. 10, p. 3, p. 5–6). The St. Francois confining unit is saturated, but its hydraulic conductivity is generally too low to yield appreciable water (Ref. 9, p. 19). These confining units separate the Ozark aquifer from the St. Francois aquifer; however, they restrict rather prevent water interchange between the two aquifers (Ref. 9, p. 15). Penetration of the St. Francois confining unit could increase the ability of contaminants to enter the underlying St. Francois aquifer. Where both the Ozark aquifer and the St. Francois aquifer are open to a well, it is possible that water from the shallow Ozark aquifer formations infiltrates the deeper Lamotte. Because the potentiometric surface of the Ozark aquifer is generally above that of the Lamotte, the potential exists for down-hole water movement in the well during non-pumping periods (Ref. 9, p. 16).

Aquifer/Stratum Name #3: St. Francois Aquifer—Bonneterre Dolomite

The Bonneterre is a fine- to medium-crystalline dolomite, which may locally be a limestone. It generally has a low clastic content, but may contain thin shale layers or partings. Sand content increases towards the base of the Bonneterre forming a gradational contact with the underlying Lamotte sandstone. In the Salem Plateau area, the Bonneterre has an average thickness of 350 feet (Ref. 9, p. 8). The Bonneterre typically has a low hydraulic conductivity and yields only modest quantities of water (Ref. 9, p. 14).

Aquifer/Stratum Name #4: St. Francois Aquifer—Lamotte Sandstone

The Lamotte Sandstone is the oldest sedimentary rock formation in the Potosi area. It is predominantly a quartzose sand, but grades laterally to an arkosic sandstone or conglomerate. It varies in color from light gray to dark brown or red. The Lamotte unconformably overlies Precambrian basement rocks. The Lamotte ranges in thickness from about 100 feet, along the margins of the St Francois Mountains, to over 300 feet in the western and southern parts of the Salem Plateau. It averages about 200 feet in thickness (Ref. 9, p. 8). The Lamotte Sandstone is responsible for most of the water produced from the St. Francois aquifer (Ref. 9, p. 14).

Before the hydrogeologic characteristics of Ordovician dolomites had been evaluated, it was commonly believed that only sandstones would yield sufficient water quantities for municipal supplies (Ref. 9, p. 16). Consequently, some municipal wells—such as those in Potosi and Mineral Point— were completed in the Cambrian Lamotte Sandstone (Ref 25, pp. 9–10). This aquifer is penetrated by relatively few deep municipal wells (Ref. 9, p. 15). It is considered a moderately-yielding aquifer, with the Lamotte Sandstone responsible for most of the production (Ref. 9, p. 14).

The St. Francois aquifer is mainly used in the unconfined outcrop area around the St. Francois Mountains, where it is the only local source of ground water. This aquifer is rarely used where it is confined, because the thicker overlying Ozark Aquifer is more readily available (Ref. 8, p. 50). Horizontal hydraulic conductivities in the St. Francois aquifer range from 0.1 to 8.6 ft/day and yields range from 100 to 500 gpm (Ref. 8, p. 50). The Lamotte Sandstone is responsible for most of the water produced from the St. Francois aquifer. The overlying Bonneterre typically has low hydraulic conductivity and yields only modest quantities of water (Ref. 9, p. 14). Because the Potosi and Mineral Point municipal wells are completed as open hole below the casing depth—set into the top of the Bonneterre—the wells are likely producing water from both formations.

The St. Francois aquifer receives recharge from two general sources: down-dip movement from the outcrop region in the St. Francois Mountains, and downward movement from the overlying Ozark aquifer

(Ref. 9, p. 15). Hydraulic conductivity information for the St. Francois is scarce because wells are generally open-hole completions and produce from all formations below the required casing length—typically 80 feet (Ref 9, p. 15, 24–28; 13, pp 4–8). A lateral hydraulic conductivity of $8x10^{-5}$ feet per second was used for the St. Francois aquifer by researchers developing a region flow model (Ref. 9, p. 15). Well yields for St. Francois aquifer wells generally range from 70 to 125 gallons per minute (Ref. 9, p. 15). Where both the Ozark and St. Francois aquifer are open to a well, it is possible for water from the upper aquifer to migrate down the well (when it is not pumping) and enter the lower aquifer. This is because the potentiometric surface of the shallower Ozark aquifer is generally above that for the Lamotte (Ref. 9, p. 16).

SUMMARY OF AQUIFER(S) BEING EVALUATED

Aquifer No.	Aquifer Name	Is Aquifer Interconnected with Upper Aquifer within 2 miles? (Y/N/NA)	Is Aquifer Continuous within 4-mile TDL? (Y/N)	Is Aquifer Karst? (Y/N)
1	Surficial Aquifer Ozark (Eminence Dolomite)	NA	Y	Y
2	Surficial Aquifer Ozark (Potosi Dolomite)	Y	Y	Y
3	St. Francois Aquifer (Bonneterre Dolomite)	Y	Y	N
4	St. Francois Aquifer (Lamotte Sandstone)	Y	Y	N

3.1 LIKELIHOOD OF RELEASE

3.1.1 OBSERVED RELEASE

Aquifer Being Evaluated: Ozark and St. Francois

Chemical Analysis

As part of the EPA and MDNR investigations in 2005 and 2006, hundreds of ground water samples were collected from private drinking water wells in all aquifer layers at similar concentration ranges. EPA samples were submitted to the EPA Region 7 laboratory for analyses of total lead. The rationale for choosing these private well sampling locations was to document any metal contamination in the Ozark aquifer. Private wells were selected throughout the Potosi area (Ref. 7, pp. 21, 22, 31). In addition, MDNR collected private well samples that showed significantly elevated level of lead, above 15 µg/L (Ref. 6, pp. 30–36). The presence of karst topography is documented in the Potosi areas including cave features, sinkholes, and springs (Ref. 6, pp. 27–31). Penetration of the St. Francois confining unit by mine shafts, vents, and exploratory borings could increase the ability of contaminants to enter the underlying St. Francois aquifer. Where both the Ozark aquifer and the St. Francois aquifer are open to a well, it is possible that water from the shallow Ozark aquifer formations infiltrates the deeper Lamotte. Because the potentiometric surface of the Ozark aquifer is generally above that of the Lamotte, the potential exists for down-hole water movement in the well during non-pumping periods (Ref. 9, p. 16). The presence of lead contamination in Potosi municipal well #4, completed in the St. Francois aquifer, supports the interconnectivity of the Ozark and St. Francois aquifers (see Section 3.1.1 of this document). Thus, the surficial aquifer is interconnected, and the following municipal and private well samples were identified to be representative background samples.

Background Concentrations and Sample Similarity: Background wells contained no concentrations of lead. Locations of the background samples are shown on Figure 2 and 3 in Reference 17 and Reference 18, respectively. Samples were collected from the same environmental media (ground water), collected and analyzed using the same procedure and laboratory as the release samples for their respective comparisons. Therefore, the release samples compared with similar background samples. Missouri well construction regulations currently require that private wells be cased a minimum of 80 feet, with the casing set a minimum of 30 feet into unweathered bedrock (Ref. 9, pp. 24–28). Below the cased depth, the wells are open hole; consequently, water produced from the well is a composite of all water bearing units between the depth of casing and total well depth. Prior to these regulations being enacted in 1987, casing requirements were set by the Department of Health but were not enforced (Ref. 32, p. 1).

The following table presents the concentrations of metals detected in the background wells and the sample quantitation limits provided by the EPA Region 7 laboratory. All laboratory reports indicate which laboratory performed the analysis, which was either conducted in house at the EPA Region 7 laboratory or out sourced to a laboratory under the contract laboratory program (CLP) (Ref. 33, p. 1). In addition, MDNR provided reference documents indicating its analysis procedure and respective methods (Ref. 31, 1–12).

GROUND WATER MIGRATION PATHWAY – BACKGROUND SAMPLES FOR RESIDENTIAL AND PUBLIC WATER SUPPLY SAMPLES

Laboratory Sample ID and Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	References
2882-131 20905 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 823–824; 13, p. 2; 15, p. 79; 16, pp. 4, 6–7, 24; 17, p. 23; 18; 26
2882-135 20854 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 811–812; 13, p. 2; 15, p. 79; 16, pp. 4, 6–7, 25; 17, p. 23; 18; 26
2882-136 20760 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	115	Ref. 7, pp. 703–704; 13, p. 2; 15, p. 79; 16, pp. 4, 6–7, 25; 17, p. 23; 18; 26
2882-138 20842 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	108	Ref. 7, pp. 799–800; 13, p. 2; 15, p. 79; 16, pp. 4, 6–7, 26; 17, p. 23; 18; 26
2882-142 20843 (E)	01/07/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 801–802; 13, p. 2; 15, p. 80; 16, pp. 4, 6–7, 27; 17, p. 24; 18; 26
2882-148 20906 (E)	01/06/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 825–826; 13, p. 2; 15, p. 81; 16, pp. 4, 6–7, 28; 17, p. 24; 18; 26
2882-150 20853 (E)	01/07/06	Lead (dissolved)	1.00 U	1.0	260	Ref. 7, pp. 809–810; 13, p. 2; 15, p. 81; 16, pp. 4, 6–7, 29; 17, p. 24; 18; 26
2882-159 20821 (E)	01/09/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 787–788; 13, p. 2; 15, p. 82; 16, pp. 4, 6–7, 31; 17, p. 24; 18; 26
2901-106 20789 (E)	01/20/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 737–738, 1293, 1295–1296, 1306; 13, p. 2; 15, p. 91; 17, p. 30; 18; 26
2901-112 20524 (E)	01/20/06	Lead (total)	1.00 U	1.0	90	Ref. 7, pp. 581–582, 1294–1296, 1307; 13, p. 2; 15, p. 92; 17, p. 30; 18; 26
2901-113 20677 (E)	01/20/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 599–600, 1294–1296, 1308; 13, p. 2; 15, p. 92; 17, p. 30; 18; 26

Laboratory Sample ID and Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	References
2901-116 20690 (E)	01/20/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 607–608, 1294–1296, 1308; 13, p. 2; 15, p. 92; 17, p. 31; 18; 26
2901-117 20823 (E)	01/21/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 791–792, 1294–1296, 1309; 13, p. 2; 15, p. 92; 17, p. 31; 18; 26
2901-118 20822 (E)	01/21/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 789–790, 1294–1296, 1309; 13, p. 2; 15, p. 92; 17, p. 31; 18; 26
2801-112 20355 (W)	10/12/05	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 139–140, 1128, 1145; 13, p. 2; 15, p. 8; 17, p. 5; 18
2915-112 20973 (W)	02/01/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 401–402, 1315–1317, 1331; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26
2915-113 20960 (W)	02/01/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 379–380, 1315–1317, 1331; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26
2915-117 20963 (W)	02/03/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 385–386, 1315–1317, 1332; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26
2915-119 20957 (W)	02/06/06	Lead (total)	1.00 U	1.0	Unknown	Ref. 7, pp. 373–374, 1315–1317, 1332; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26
2915-121 20964 (W)	02/06/06	Lead (dissolved)	1.00 U	1.0	120	Ref. 7, pp. 387–388, 1315, 1333; 13, p. 2; 15, p. 100; 17, p. 34; 18; 26
		Lead (total)	1.00 U	1.0		
2915-122 20974 (W)	02/07/06	Lead (dissolved)	1.00 U	1.0	Unknown	Ref. 7, pp. 403–404, 1315, 1333; 13, p. 2; 15, p. 100; 17, p. 34; 18; 26
		Lead (total)	1.00 U	1.0		
94.E273 Potosi PWS Well # 5 (W)	07/05/1994	Lead (dissolved)	5 U	5	1,425 ft bgs -369 ft msl	13, p. 2; 22, pp. 2–10; 23; 25, pp. 10; 31, pp. 1, 4, 5, 7, 10

Laboratory Sample ID and Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	References
97.H553 Potosi PWS Well # 5 (W)	08/12/1997	Lead (dissolved)	< 4	2.5	1,425 ft bgs -369 ft msl	
0115288 Potosi PWS Well # 5 (W)	01/16/2001	Lead (dissolved)	< 4	2.5	1,425 ft bgs -369 ft msl	
0340895 Potosi PWS Well # 5 (W)	12/17/2003	Lead (dissolved)	1 U	1	1,425 ft bgs -369 ft msl	

Notes:

* The SQLs provided in this table are referred to as reporting limits. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are sometimes called the sample quantitation limit.

ID Identification
µg/L micrograms per liter
U The analyte was not detected at or above the reporting limit
1 refers to HRS subaquifer
E eastern aquifer
W western aquifer
ft bgs feet below ground surface
ft msl feet above mean sea level

Contaminated Samples

Although arsenic, barium, cadmium, and lead were found in the samples collected at the site, only lead has been used to document actual contamination for scoring purposes. Figure 2 in Reference 18 and the figure included with Reference 13 depict background and release ground water samples associated with the EPA investigations.

TABLE 3

OBSERVED RELEASE SAMPLES**

Sample ID Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Population Served	References
2801-103 20328 (W)	10/12/05	Lead (dissolved)	47.2 J[1]	1.0	Unknown	3	Ref. 7, pp. 283–284, 1127, 1131–1133, 1142; 13, p. 2; 15, p. 7; 17, p. 5; 18; 26
2801-108 20397 (W)	10/11/05	Lead (dissolved)	21.50 J[1]	1.0	300	4	Ref. 7, pp. 323–324, 1127, 1131–1133, 1144; 13, p. 2; 15, p. 8; 17, p. 5; 18; 26
2801-111 20321 (W)	10/11/05	Lead (dissolved)	22.1	1.0	180	2	Ref. 7 pp. 275–276, 1128, 1131–1133, 1145; 13, p. 2; 15, p. 8; 17, p. 5; 18; 26
2801-117 20344 (W)	10/11/05	Lead (dissolved)	17.3	1.0	Unknown	2	Ref. 7 pp. 295–296, 1128, 1131–1133, 1146; 13, p. 2; 15, p. 9; 17, p. 5; 18; 26
2801-121 20380 (E)	10/20/05	Lead (dissolved)	20.9	1.0	Unknown	3	Ref. 7 pp. 407–408, 1128, 1131–1133, 1147; 13, p. 2; 15, p. 9; 17, p. 5; 18; 26
2801-202 20328 (W)	10/12/05	Lead (total)	48.3 J[1]	1.0	Unknown	3	Ref. 7 pp. 283–284, 1128, 1131–1133, 1148; 13, p. 2; 15, p. 10; 17, p. 1; 18; 26
2801-209 20332 (W)	10/12/05	Lead (total)	17.2 J[1]	1.0	250	3	Ref. 7 pp. 289–290, 1128, 1131–1133, 1151; 13, p. 2; 15, p. 11; 17, p. 1; 18; 26
2801-210 20329 (W)	10/12/05	Lead (total)	58.8 J[1]	1.0	200	4	Ref. 7 pp. 285–286, 1128, 1131–1133, 1151; 13, p. 2; 15, p. 11; 17, p. 1; 18; 26

Sample ID Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Population Served	References
2801-211 20390 (W)	10/11/05	Lead (total)	24.1 J[1]	1.0	280	3	Ref. 7 pp. 321–322, 1128, 1131–1133, 1151; 13, p. 2; 15, p. 11; 17, p. 1; 18; 26
2801-212 20325 (W)	10/12/05	Lead (total)	47.2 J[1]	1.0	Unknown	5	Ref. 7 pp. 277–278, 1128, 1131–1133, 1152; 13, p. 2; 15, p. 11; 17, p. 1; 18; 26
2801-213 20321 (W)	10/11/05	Lead (total)	19.0 J[1]	1.0	180	2	Ref. 7 pp. 275–276, 1128, 1131–1133, 1152; 13, p. 2; 15, p. 11; 17, p. 1; 18; 26
2801-220 20344 (W)	10/11/05	Lead (total)	17.5	1.0	Unknown	2	Ref. 7 pp. 295–296, 1128, 1131–1133, 1154; 13, p. 2; 15, p. 12; 17, p. 1; 18; 26
2801-226 20327 (W)	10/12/05	Lead (total)	36.8	1.0	400	1	Ref. 7 pp. 281–282, 1129, 1131–1133, 1155; 13, p. 2; 15, p. 13; 17, p. 2; 18; 26
2801-267 20326 (W)	10/22/05	Lead (total)	28.0	1.0	Unknown	2	Ref. 7 pp. 279–280, 1129, 1131–1133, 1165; 13, p. 2; 15, p. 18; 17, p. 2; 18; 26
2801-268 20432 (E)	10/20/05	Lead (total)	16.4	1.0	Unknown	4	Ref. 7 pp. 437–438, 1128, 1131–1133, 1166; 13, p. 2; 15, p. 18; 17, p. 3; 18; 26
2801-270 20424 (W)	10/20/05	Lead (total)	43.0	1.0	300	2	Ref. 7 pp. 421–422, 1128, 1131–1133, 1166; 13, p. 2; 15, p. 18; 17, p. 3; 18; 26
2801-271 20425 (W)	10/20/05	Lead (total)	16.9	1.0	270	3	Ref. 7 pp. 423–424, 1128, 1131–1133, 1166; 13, p. 2; 15, p. 18; 17, p. 3; 18; 26
2823-101 20495 (W)	10/24/05	Lead (total)	21.5	1.0	200	11	Ref. 7 pp. 465–466, 1171, 1174–1175, 1184; 13, p. 2; 15, p. 36; 17, p. 7; 18; 26
2823-104 20427 (W)	10/24/05	Lead (total)	30.9	1.0	180	4	Ref. 7 pp. 427–428, 1171, 1174–1175, 1185; 13, p. 2; 15, p. 37; 17, p. 7; 18; 26
2823-109 20380 (E)	10/20/05	Lead (total)	15.9	1.0	Unknown	3	Ref. 7 pp. 407–408, 1171, 1174–1175, 1186; 13, p. 2; 15, p. 37; 17, p. 7; 18; 26

Sample ID Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Population Served	References
2823-113 20397 (W)	10/11/05	Lead (total)	23.0	1.0	300	4	Ref. 7 pp. 323–324, 1172, 1174–1175, 1187; 13, p. 2; 15, p. 38; 17, p. 7; 18; 26
2823-116 20435 (E)	10/20/05	Lead (total)	38.2	1.0	Unknown	3	Ref. 7 pp. 439–440, 1172, 1174–1175, 1188; 13, p. 2; 15, p. 38; 17, p. 7; 18; 26
2823-133 20335 (W)	10/25/05	Lead (total)	21.2	1.0	340	2	Ref. 7 pp. 291–292, 1172, 1174–1175, 1192; 13, p. 215, p. 40; 17, p. 8; 18; 26
2823-137 20455 (W)	10/26/05	Lead (total)	26.8	1.0	Unknown	1	Ref. 7 pp. 341–342, 1172, 1174–1175, 1193; 13, p. 2; 15, p. 41; 17, p. 8; 18; 26
2823-140 20508 (E)	10/26/05	Lead (total)	21.7	1.0	Unknown	9	Ref. 7 pp. 545–546, 1172, 1174–1175, 1194; 13, p. 2; 15, p. 41; 17, p. 8; 18; 26
2823-144 20503 (E)	10/26/05	Lead (total)	34.6	1.0	Unknown	3	Ref. 7 pp. 543–544, 1172, 1174–1175, 1195; 13, p. 2; 15, p. 41; 17, p. 8; 18; 26
2832-119 20410 (W)	11/16/05	Lead (total)	21.8 J[1]	1.0	Unknown	5	Ref. 7 pp. 179–180, 1203, 1205–1207, 1220; 13, p. 2; 15, p. 38; 17, p. 13; 18; 26
2832-120 20373 (W)	11/16/05	Lead (total)	21.5 J[1]	1.0	Unknown	6	Ref. 7 pp. 159–160, 1203, 1205–1207, 1221; 13, p. 2; 15, p. 39; 17, p. 13; 18; 26
2832-140 20494 (W)	11/19/05	Lead (total)	19.5 J[1]	1.0	150	4	Ref. 7 pp. 345–346, 1203, 1205–1207, 1226; 13, p. 2; 15, p. 41; 17, p. 14; 18; 26
2832-166 20465 (E)	11/22/05	Lead (total)	18.3	1.0	100	5	Ref. 7 pp. 909–910, 1204–1207, 1232; 13, p. 2; 15, p. 44; 17, p. 15; 18; 26
2863-111 20576 (E)	12/01/05	Lead (total)	39.0	1.0	Unknown	2	Ref. 7 pp. 1045–1046, 1236, 1239–1240, 1251; 13, p. 2; 15, p. 51; 17, p. 17; 18; 26
2863-116 20519 (E)	12/01/05	Lead (total)	50.2	1.0	Unknown	4	Ref. 7 pp. 979–980, 1237, 1239–1240, 1252; 13, p. 2; 15, p. 52; 17, p. 17; 18; 26

Sample ID Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Population Served	References
2863-134 20464 (E)	12/05/05	Lead (total)	41.3 J[1]	1.0	85	2	Ref. 7 pp. 969–970, 1237, 1239–1240, 1257; 13, p. 2; 15, p. 54; 17, p. 18; 18; 26
2863-137 20625 (E)	12/03/05	Lead (total)	18.9 J[1]	1.0	Unknown	2	Ref. 7 pp. 1071–1072, 1237, 1239–1240, 1257; 13, p. 2; 15, p. 55; 17, p. 18; 18; 26
2863-150 20471 (E)	12/06/05	Lead (total)	45.9	1.0	205	2	Ref. 7 pp. 917–918, 1237, 1239–1240, 1261; 13, p. 2; 15, p. 56; 17, p. 19; 18; 26
2863-155 20459 (E)	12/06/05	Lead (total)	73.7	1.0	100	5	Ref. 7 pp. 961–962, 1237, 1239–1240, 1262; 13, p. 2; 15, p. 57; 17, p. 19; 18; 26
2863-157 20594 (E)	12/07/05	Lead (total)	83.9	1.0	250	3	Ref. 7 pp. 1059–1060, 1237, 1239–1240, 1262; 13, p. 2; 15, p. 57; 17, p. 19; 18; 26
2863-158 20600 (E)	12/07/05	Lead (total)	41.3	1.0	Unknown	5	Ref. 7 pp. 1061–1062, 1238–1240, 1263; 13, p. 2; 15, p. 57; 17, p. 19; 18; 26
2873-103 20613 (E)	12/14/05	Lead (total)	110	1.0	200-300	2	Ref. 7 pp. 505–506, 1269, 1271, 1277; 13, p. 2; 15, p. 62; 17, p. 26; 18; 26
2873-107 20592 (E)	12/16/05	Lead (total)	34.5	1.0	Unknown	2	Ref. 7 pp. 1055–1056, 1269, 1271, 1278; 13, p. 2; 15, p. 63; 17, p. 27; 18; 26
2873-111 20637 (E)	12/08/05	Lead (total)	15.3	1.0	240	1	Ref. 7 pp. 525–526, 1269, 1271, 1279; 13, p. 2; 15, p. 63; 17, p. 27; 18; 26
2873-126 20604 (W)	12/17/05	Lead (total)	15.0	1.0	200	2	Ref. 7 pp. 495–496, 1269, 1271, 1282; 13, p. 2; 15, p. 65; 17, p. 27; 18; 26
2873-127 20603 (W)	12/17/05	Lead (total)	32.4	1.0	172	1	Ref. 7 pp. 493–494, 1270–1271, 1283; 13, p. 2; 15, p. 65; 17, p. 27; 18; 26
2873-132 20607 (E)	12/19/05	Lead (total)	16.7	1.0	200	6	Ref. 7 pp. 499–500, 1270–1271, 1284; 13, p. 2; 15, p. 66; 17, p. 28; 18; 26

Sample ID Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Population Served	References
2873-134 20618 (E)	12/19/05	Lead (total)	18.4	1.0	125	2	Ref. 7 pp. 513–514, 1270–1271, 1284; 13, p. 2; 15, p. 66; 17, p. 28; 18; 26
2873-138 20481 (E)	12/20/05	Lead (total)	31.9	1.0	Unknown	1	Ref. 7 pp. 541–542, 1270–1271, 1285; 13, p. 2; 15, p. 66; 17, p. 28; 18; 26
2873-140 20638 (W)	12/20/05	Lead (total)	22.3	1.0	Unknown	2	Ref. 7 pp. 351–352, 1270–1271,, 1286; 13, p. 2; 15, p. 67; 17, p. 28; 18; 26
2873-141 20396 (E)	12/20/05	Lead (total)	25.2 J[1]	1.0	Unknown	4	Ref. 7 pp. 533–534, 1270–1271, 1286; 13, p. 2; 15, p. 67; 17, p. 28; 18; 26
2901-108 20701 (E)	01/20/06	Lead (total)	19.9	1.0	Unknown	4	Ref. 7 pp. 627–628, 1293, 1295–1269, 1306; 13, p. 2; 15, p. 91; 17, p. 30; 18; 26
2801-106 20291 (W)	10/12/05	Lead (dissolved)	2.53 J[1]	1.0	Unknown	1	Ref. 7 pp. 133–134, 1127, 1131–1133, 1143; 13, p. 2; 15, p. 7; 17, p. 5; 18; 26
2801-110 20272 (W)	10/10/05	Lead (dissolved)	8.17 J[1]	1.0	500	2	Ref. 7 pp. 241–242, 1128, 1131–1133, 1144; 13, p. 2; 15, p. 8; 17, p. 5; 18; 26
2801-216 20291 (W)	10/12/05	Lead (total)	14.80 J[1]	1.0	Unknown	1	Ref. 7 pp. 133–134, 1128, 1131–1133, 1153; 13, p. 2; 15, p. 12; 17, p. 1; 18; 26
2801-238 20273 (W)	10/11/05	Lead (total)	9.51 J[2] (7.26)	1.0	130	2	Ref. 7 pp. 113–114, 1129, 1131–1133, 1158; 13, p. 2; 15, p. 14; 17, p. 2; 18; 26
2801-255 20272 (W)	10/10/05	Lead (total)	8.89 J[2] (6.79)	1.0	500	2	Ref. 7 pp. 241–242, 1129, 1131–1133, 1162; 13, p. 2; 15, p. 16; 17, p. 2; 18; 26
2832-122 20398 (W)	11/18/05	Lead (total)	5.52 J[1]	1.0	Unknown	2	Ref. 7 pp. 325–326, 1203, 1205–1207, 1221; 13, p. 2; 15, p. 39; 17, p. 13; 18; 26

Sample ID Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Population Served	References
2832-129 20315 (W)	11/18/05	Lead (total)	2.76 J[1]	1.0	110	2	Ref. 7 pp. 263–264, 1203, 1205–1207, 1223; 13, p. 2; 15, p. 40; 17, p. 13; 18; 26
2832-141 20468 (W)	11/19/05	Lead (total)	3.50 J[1]	1.0	Unknown	4	Ref. 7 pp. 343–344, 1203, 1205–1207, 1226; 13, p. 2; 15, p. 41; 17, p. 14; 18; 26
2832-142 20402 (W)	11/19/05	Lead (total)	6.40 J[1]	1.0	175	5	Ref. 7 pp. 327–328, 1203, 1205–1207, 1226; 13, p. 2; 15, p. 41; 17, p. 14; 18; 26
2832-144 20386 (W)	11/19/05	Lead (total)	2.60 J[1]	1.0	165	3	Ref. 7 pp. 315–316, 1203, 1205–1207, 1227; 13, p. 2; 15, p. 41; 17, p. 14; 18; 26
2832-150 20587 (E)	11/21/05	Lead (total)	7.43 J[1]	1.0	120	1	Ref. 7 pp. 567–568, 1203, 1205–1207, 1228; 13, p. 2; 15, p. 42; 17, p. 14; 18; 26
2863-126 20513 (E)	12/05/05	Lead (total)	6.69 J[1]	1.0	Unknown	4	Ref. 7 pp. 975–976, 1237, 1239–1240, 1255; 13, p. 2; 15, p. 53; 17, p. 18; 18; 26
2863-127 20574 (E)	12/05/05	Lead (total)	10.3 J[1]	1.0	150	4	Ref. 7 pp. 1043–1044, 1237, 1239–1240, 1255; 13, p. 2; 15, p. 53; 17, p. 18; 18; 26
2863-128 20572 (E)	12/05/05	Lead (total)	3.80 J[1]	1.0	140	1	Ref. 7 pp. 1101–1102, 1237, 1239–1240, 1255; 13, p. 2; 15, p. 53; 17, p. 18; 18; 26
2863-129 20444 (E)	12/05/05	Lead (total)	2.99 J[1]	1.0	Unknown	1	Ref. 7 pp. 955–956, 1237, 1239–1240, 1255; 13; 15, p. 54; 17, p. 18; 18; 26
2863-132 20445 (E)	12/05/05	Lead (total)	10.8 J[1]	1.0	90-110	4	Ref. 7 pp. 957–958,1237, 1239–1240, 1256; 13, p. 2; 15, p. 54; 17, p. 18; 18; 26
2915-103 20422 (W)	02/01/06	Lead (total)	10.3 J[3]	1.0	Unknown	3	Ref. 7 pp. 417–418, 1314, 1316–1317, 1328; 13, p. 2; 15, p. 98; 17, p. 33; 18; 26

Sample ID Property or Well No. (Aquifer)[1]	Sampling Date or Analyzed Date	Hazardous Substance	Hazardous Substance Concentration (µg/L)	Sample Quantitation Limit* (µg/L)	Well Depth (ft bgs)	Population Served	References
2915-104 20930 (W)	02/02/06	Lead (total)	8.66 J[3]	1.0	125	2	Ref. 7 pp. 367–368, 1315–1317, 1329; 13, p. 2; 15, p. 98; 17, p. 33; 18; 26
2915-106 20912 (W)	02/02/06	Lead (total)	2.95 J[3]	1.0	Unknown	2	Ref. 7 pp. 359–360, 1315–1317, 1329; 13, p. 2; 15, p. 98; 17, p. 33; 18; 26
2915-107 20965 (W)	02/01/06	Lead (total)	6.57 J[3]	1.0	130	4	Ref. 7 pp. 389–390, 1315–1317, 1329; 13, p. 2; 15, p. 98; 17, p. 33; 18; 26
2915-110 20959 (W)	02/02/06	Lead (total)	5.47 J[3]	1.0	100	2	Ref. 7 pp. 377–378, 1315–1317, 1330; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26
2915-114 20913 (W)	02/03/06	Lead (total)	3.42 J[3]	1.0	47	2	Ref. 7 pp. 361–362, 1315–1317, 1331; 13, p. 2; 15, p. 99; 17, p. 34; 18; 26
0417143 Potosi PWS Well #4 (W)	02/13/04	Lead (dissolved)	12.6	1.0	1,020 ft bgs -3 ft msl	700	Ref. 13, p. 2; 21, pp. 2–5; 23; 24, p. 1; 25, p. 9; 31, pp. 1–2, 4

Notes:

* The SQLs provided in this table are referred to as reporting limits in Reference 43. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are sometimes called the sample quantitation limit.

** Please see Reference 13 Geology Map figure 1 for sub-aquifer specific sample locations considered for scoring purposes (Ref. 13, p. 2)

J[1] The analyte has been positively identified in the sample; however the reported value is an estimate due to serial percent dilution being above the control limit. The reported value may be biased low. Therefore, even if the value was adjusted to a higher value to compensate for the bias, it would still meet the observed release criteria.

J[2] The analyte has been positively identified in the sample; however the reported value is an estimate due to poor precision obtained with this analyte in the laboratory duplicate sample. The reported value is biased unknown. Values adjusted in accordance with EPA factsheet "Using Qualified Data to Document an Observed Release and Observed Contamination are presented in parentheses.

J[3] The analyte has been positively identified in the sample; however the reported value is an estimate due to the peak width at 10% peak height exceeding 0.80 amu in the ICP-MS tune. The reported value may be biased low. Therefore, even if the value was adjusted to a higher value to compensate for the bias, it would still meet the observed release criteria.

µg/L micrograms per liter

1 refers to HRS subaquifer

E	eastern aquifer
W	western aquifer
ft bgs	feet below ground surface
ft msl	feet above mean sea level

Attribution

Lead mining in the Potosi area of Washington County has a long history dating back to the early 1700s. Potosi is located in the region know as the Old Lead Belt, where large-scale mining occurred in Washington, Madison, and St. Francois Counties. The lead mineralization occurs in fractured bedrock and in red clay residuum derived chiefly from the Cambrian Potosi and Eminence dolomites. Miners recovered lead from both residuum and shafts that extended into the bedrock. Continuous mining in the Potosi area began at Mine Renault—just north of Potosi—in 1721 with the use of slave labor. Mine Renault produced as much as 1,500 pounds of ore per day. Many small mines opened and closed during this time, with continuous production for the first 20 years and intermittent production until 1799. Figure 2 in Reference 13 shows the abundance of mined lands and IMOP database entries in the Potosi area.

Prior to 1799, miners, to this point, had recovered galena by hand mining and cleaning from shallow pits less than 10 feet deep. It was not until 1799, when Moses Austin sank a shaft to a depth to 80 feet and erected a reverberatory furnace that lead mining began to develop on a larger scale. This mining process continued until shortly after 1900. Beginning in 1904, the Point Mining and Milling Company used a steam shovel and wet-process mill. Around 1924, the Eagle-Picher Company and National Pigments and Chemical Company began production by stripping residuum and processing the material in a washer and jig plant. Mining operations shifted from hand mining to mechanized mining during this period and continued until 1942. After 1942, lead was mined by removing residuum with mechanized shovels and front-end loaders. The residuum was loaded into trucks and hauled to washers, where clay was removed with high-pressure water in a rotary breaker. This procedure separated the rock by breaking it into smaller pieces. The mined material was then passed through log washers that removed even more clay and separated the mined material. Subsequently, it passed through trammels and onto jigs, where material was separated by weight. Finally, lead and barite were separated from any remaining waste rock (Ref. 7, pp. 5–23).

Barite mining did not occur in the Potosi area until post-Civil War time. Before this time, barite was placed in waste piles when lead was recovered. Barite mineralization occurs mostly in red clay residuum, also derived from the Cambium Potosi and Eminence dolomites. The clay residuum is generally located several inches to 3 or 4 feet below barren soil overburden. The average thickness of the residuum ranges from a few feet to more than 30 feet. Barite mining started because it was found to be a long-lasting white pigment. Later, barite was discovered to be a useful weighting agent in oil drilling. During the 1900s, Washington County was the world leader in barite production. Many of the large mining operations reworked land that experienced hand mining for lead or barite. Considerable ore was usually left behind between pits and shafts (Ref. 7, pp. 5–23).

MDNR conducted investigations at the site in June 2005. During this investigation, MDNR attempted to obtain access to all residential properties on or near the heavily mined areas in each study area to assess the extent of lead contamination in surface soils and ground water. Soil and ground water samples were collected at each property accessed for analysis of lead. MDNR data suggested area-wide ground water contaminated with lead at the site (Ref. 6, pp. 5–93).

A total of 174 ground water samples were collected during field activities for the PA/SI. Thirty-seven samples (21 percent) contained lead above the regulatory action level of 15 µg/L. Lead concentrations in these samples ranged from 15.1 to 92.8 µg/L. Barium was detected in three samples at levels that exceed the maximum contaminant level (MCL) of 2,000 µg/L. These barium results ranged from 2,090 to 2,230 µg/L. Cadmium was detected above its MCL of 5 µg/L in one sample, at a concentration of 5.73 µg/L (Ref. 7, pp. 5–4).

EPA conducted a RSE from September 2005 through February 2006. The RSE objective was to further define the extent of lead contamination in surface soils and ground water at the site. During these investigations, a total of 1,280 residential properties were screened. Of this total, 675 properties (53 percent) contained lead in surface soils at concentrations below the EPA Region 9 preliminary remediation goal (PRG) of 400 parts per million (ppm), 24 properties (2 percent) contained lead above 400 ppm only in the drip zone, 446 residences (35 percent) contained lead between 400 ppm and 1,200 ppm outside the drip zone, and 135 residences (10 percent) contained lead above 1,200 ppm outside the drip zone. The highest concentration of lead detected in residential surface soils at the site was 10,633 ppm. These data are based on the highest average XRF reading for lead within the area screened at each residential property (Ref. 7, pp. 5–23).

As discussed earlier in multiple sections, lead and mineral mining in the Potosi area of Washington County has a long history dating back hundreds of years. Early miners tossed the barite aside into waste piles, as it originally had few uses. It became valuable after the Civil War, when it was used as a long-lasting white pigment. Barite mining boomed in 1926, when the mineral was discovered to be a useful weighting agent in oil drilling mud (Ref. 20, pp. 1–2). The production of barite in Washington County started to decline in 1985 because of competition in Nevada and overseas (Ref. 20, p. 1). Commercial mining operations created large piles of mining wastes (Ref., p. 2). The release wells presented above are located down-gradient of the possible sources and contain elevated concentrations of lead (see Section 3.1.1 of this document; Refs. 18 and 29). The occurrence of these metals in the ground water samples is at least partially attributed to the tailings piles. Some of the metals in the ground water may be naturally occurring; however, there are a significant number of wells located up-gradient of the evaluated sources that contain low levels, or no levels of lead, which indicates the naturally occurring levels of barium and lead are significant less than what is found in the vicinity of the source areas Ground water in the Potosi area has been divided into two areas based on flow away from a topographic high that generally bisects the area north to south. The further downgradient a well is located relative to this topographic high, the more likely it is that ground water has been impacted by multiple source areas (Refs. 13, p. 3). Because there are multiple sources upgradient of contaminated target wells, it is unfeasible to associate release to any one source. The ground water plumes currently are uncontained, and thus present a threat to nearby human health and the environment.

Hazardous Substances Released: Lead

Ground Water Observed Release Factor Value: 550

3.1.2 POTENTIAL TO RELEASE

Not Evaluated.

3.2 WASTE CHARACTERISTICS

3.2.1 TOXICITY/MOBILITY

Hazardous Substance	Source No.	Toxicity Factor Value	Mobility Factor Value	Does Haz. Substance Meet Observed Release? (Y/N)	Toxicity/ Mobility (Table 3-9)	Reference
Lead	1	10,000	1	Yes	10,000	2, p. BI-8

Toxicity/Mobility Factor Value: 10,000
(Ref. 1, Table 3-9)

3.2.2 HAZARDOUS WASTE QUANTITY

Source No.	Source Type	Source Hazardous Waste Quantity
1	Ground Water Plume with no single identified Source	> 0, but unknown

The HRS states that if the hazardous constituent quantity is not adequately determined for one or more sources then assign a factor value of 100 if any target for that migration pathway is subject to Level I or Level II (Ref. 1, Section 2.4.2.2). As there are Level I and Level II targets for this pathway (see Section 3.3 of this document), 100 will be assigned as the hazardous waste quantity factor value.

Sum of Values: > 0
Hazardous Waste Quantity Factor Value: 100
(Ref. 1, Table 2-6)

3.2.3 WASTE CHARACTERISTICS FACTOR CATEGORY VALUE

As specified in the HRS (Ref. 1, Section 3.2.3), the Hazardous Waste Quantity Factor Value of 100 is multiplied by the highest toxicity/mobility value of 10,000 for lead, resulting in a product of 1,000,000 (1.0E+06). Based on this product, a waste characteristics factor value (WCFV) of 32 is assigned from Table 2-7 of the HRS Rule (Ref., Section 2.4.3.1).

Toxicity/Mobility Factor Value: 10,000
Hazardous Waste Quantity Factor Value: 100

Toxicity/Mobility Factor Value X Hazardous Waste Quantity Factor Value: 1,000,000
Waste Characteristics Factor Category Value: 32
(Table 2-7)

3.3 TARGETS

3.3.1 NEAREST WELL

The following nearest well contains contamination that meets the observed release criteria, and the lead concentration is above the HRS health-based benchmark of 15 µg/L (MCL/MCLG) (See Section 3.1.1 of this document; Refs. 1, Table 2-3, 3-10; 2, p. 9).

Well ID: **2873-103**
Level of Contamination (I, II, or potential): I

Nearest Well Factor Value: 50
(Ref. 1, Table 3-11; Section 3.1.1 of this document)

3.3.2 POPULATION

3.3.2.1 Level of Contamination

3.3.2.2 Level I Targets (concentrations associated with Level I targets are presented in Section 3.1.1 of this document)

The following targets obtain drinking water from wells that contained one or more analytes at concentrations that meet the observed release criteria and are above an HRS health-based benchmark; specifically, lead above its MCL/MCLG of 15 (µg/L) (Ref. 1, Table 2-3, Table 3-10, and Section 3.1.1).

Sample ID Number	Aquifer No.	Population Served	Reference
2801-103 W	1	3	Ref. 7, pp. 283–284
2801-108 W	1	4	Ref. 7, pp. 323–324
2801-111 W	1	2	Ref. 7 pp. 275–276
2801-117 W	1	2	Ref. 7 pp. 295–296
2801-121 E	1	3	Ref. 7 pp. 407–408
2801-202 W	1	3	Ref. 7 pp. 283–284
2801-209 W	1	3	Ref. 7 pp. 289–290
2801-210 W	1	4	Ref. 7 pp. 285–286
2801-211 W	1	3	Ref. 7 pp. 321–322
2801-212 W	1	5	Ref. 7 pp. 277–278
2801-213 W	1	2	Ref. 7 pp. 275–276
2801-220 W	1	2	Ref. 7 pp. 295–296
2801-226 W	1	1	Ref. 7 pp. 281–282
2801-267 W	1	2	Ref. 7 pp. 279–280
2801-268 E	1	4	Ref. 7 pp. 437–438
2801-270 W	1	2	Ref. 7 pp. 421–422
2801-271 W	1	3	Ref. 7 pp. 423–424
2823-101 W	1	11	Ref. 7 pp. 465–466
2823-104 W	1	4	Ref. 7 pp. 427–428
2823-109 E	1	3	Ref. 7 pp. 407–408
2823-113 W	1	4	Ref. 7 pp. 323–324
2823-116 E	1	3	Ref. 7 pp. 439–440
2823-133 W	1	2	Ref. 7 pp. 291–292
2823-137 W	1	1	Ref. 7 pp. 341–342
2823-140 E	1	9	Ref. 7 pp. 545–546
2823-144 E	1	3	Ref. 7 pp. 543–544

Sample ID Number	Aquifer No.	Population Served	Reference
2832-119 W	1	5	Ref. 7 pp. 179–180
2832-120 W	1	6	Ref. 7 pp. 159–160
2832-140 W	1	4	Ref. 7 pp. 345–346
2832-166 E	1	5	Ref. 7 pp. 909–910
2863-111 E	1	2	Ref. 7 pp. 1045–1046
2863-116 E	1	4	Ref. 7 pp. 979–980
2863-134 E	1	2	Ref. 7 pp. 969–970
2863-137 E	1	2	Ref. 7 pp. 1071–1072
2863-150 E	1	2	Ref. 7 pp. 917–918
2863-155 E	1	5	Ref. 7 pp. 961–962
2863-157 E	1	3	Ref. 7 pp. 1059–1060
2863-158 E	1	5	Ref. 7 pp. 1061–1062
2873-103 E	1	2	Ref. 7 pp. 505–506
2873-107 E	1	2	Ref. 7 pp. 1055–1056
2873-111 E	1	1	Ref. 7 pp. 525–526
2873-126 W	1	2	Ref. 7 pp. 495–496
2873-127 W	1	1	Ref. 7 pp. 493–494
2873-132 W	1	6	Ref. 7 pp. 499–500
2873-134 E	1	2	Ref. 7 pp. 513–514
2873-138 E	1	1	Ref. 7 pp. 541–542
2873-140 W	1	2	Ref. 7 pp. 351–352
2873-141 E	1	4	Ref. 7 pp. 533–534
2901-108 E	1	2	Ref. 7, pp. 627–628

Sum of Population Served by Level I Wells: 158
Western sub-aquifer: 89
Eastern sub-aquifer: 69

Sum of Population Served by Level I Wells x 10: 1,580
Western sub-aquifer: 890
Eastern sub-aquifer: 670

Level I Concentrations Factor Value: 1,580
Level I Concentrations Factor Value (western sub-aquifer): 890
Level I Concentrations Factor Value (eastern sub-aquifer): 670

3.3.2.3 Level II Targets (concentrations associated with Level II targets are presented in Section 3.1.1)

The following targets obtain drinking water from wells that contained one or more analytes at concentrations that meet the observed release criteria and are not above an HRS health-based benchmark (Ref. 1, Table 2-3, Table 3-10, and Section 3.1.1).

`

Sample ID No.	Aquifer	Population Served	References
0417143 (Potosi PWS Well #4) W	1	700	Ref. 24, p. 1

Sample ID No.	Aquifer	Population Served	References
2801-106 W	1	1	Ref. 7 pp. 133–134
2801-110 W	1	2	Ref. 7 pp. 241–242
2801-216 W	1	1	Ref. 7 pp. 133–134
2801-238 W	1	2	Ref. 7 pp. 113–114
2801-255 W	1	2	Ref. 7 pp. 241–242
2832-122 W	1	2	Ref. 7 pp. 325–326
2832-129 W	1	2	Ref. 7 pp. 263–264
2832-141 W	1	4	Ref. 7 pp. 343–344
2832-142 W	1	5	Ref. 7 pp. 327–328
2832-144 W	1	3	Ref. 7 pp. 315–316
2832-150 E	1	1	Ref. 7 pp. 567–568
2863-126 E	1	4	Ref. 7 pp. 975–976
2863-127 E	1	4	Ref. 7 pp. 1043–1044
2863-128 E	1	1	Ref. 7 pp. 1101–1102
2863-129 E	1	1	Ref. 7 pp. 955–956
2863-132 E	1	3	Ref. 7, pp. 957–958
2915-103 W	1	3	Ref. 7 pp. 957–958
2915-104 W	1	2	Ref. 7 pp. 417–418
2915-106 W	1	2	Ref. 7 pp. 367–368
2915-107 W	1	4	Ref. 7 pp. 359–360
2915-110 W	1	2	Ref. 7 pp. 389–390
2915-114 W	1	2	Ref. 7 pp. 377–378

Sum of Population Served by Level II Wells: 753
Western sub-aquifer: 739
Eastern sub-aquifer: 14

Sum of Population Served by Level II Wells x 1: 753
Western sub-aquifer: 739
Eastern sub-aquifer: 14

Level II Concentrations Factor Value: 753
Level II Concentrations Factor Value (Sub-Aquifer 1): 739
Level II Concentrations Factor Value (Sub-Aquifer 2): 14

3.3.2.4 Potential Contamination

Not Scored.

3.3.3 RESOURCES

Not Scored.
Resources Factor Value:

3.3.4 WELLHEAD PROTECTION AREA

Not Scored.

Wellhead Protection Area Factor Value:

4.0 SURFACE WATER MIGRATION PATHWAY

Not Scored.

5.0 SOIL EXPOSURE PATHWAY

Not Scored.

6.0 AIR MIGRATION PATHWAY

Not Scored.

APPENDIX A
SUB-AQUIFER SCORESHEETS

TABLE 3-1.–GROUND WATER MIGRATION PATHWAY SCORESHEET

EASTERN SUB-AQUIFER

Factor Categories and Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer:		
1. Observed Release:	550	550
2. Potential to Release:		
2a. Containment	10	Not Scored
2b. Net Precipitation	10	Not Scored
2c. Depth to Aquifer	5	Not Scored
2d. Travel Time	35	Not Scored
2e. Potential to Release [lines 2a x (2b + 2c + 2d)]	500	Not Scored
3. Likelihood of Release (higher of lines 1 and 2e)	550	550
Waste Characteristics:		
4. Toxicity/Mobility	a	10,000
5. Hazardous Waste Quantity	a	100
6. Waste Characteristics	100	32
Targets:		
7. Nearest Well	50	50
8. Population:		
8a. Level I Concentrations	b	670
8b. Level II Concentrations	b	11
8c. Potential Contamination	b	Not Scored
8d. Population (lines 8a + 8b + 8c)	b	681
9. Resources	5	Not Scored
10. Wellhead Protection Area	20	Not Scored
11. Targets (lines 7 + 8d + 9 + 10)	b	731
GROUND WATER MIGRATION SOURCE FOR AN AQUIFER		
12. Aquifer Source [(lines 3 x 6 x 11)/82,500][c]	100	100
GROUND WATER MIGRATION PATHWAY SCORE		
13. Pathway Score (S_{gw}), (highest value from line 12 for all aquifers evaluated)[c]	100	100

Notes:
[a] Maximum value applies to waste characteristics category
[b] Maximum value not applicable
[c] Do not round to nearest integer

TABLE 3-1.–GROUND WATER MIGRATION PATHWAY SCORESHEET

WESTERN SUB-AQUIFER

Factor Categories and Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer:		
1. Observed Release:	550	550
2. Potential to Release:		
2a. Containment	10	Not Scored
2b. Net Precipitation	10	Not Scored
2c. Depth to Aquifer	5	Not Scored
2d. Travel Time	35	Not Scored
2e. Potential to Release [lines 2a x (2b + 2c + 2d)]	500	Not Scored
3. Likelihood of Release (higher of lines 1 and 2e)	550	550
Waste Characteristics:		
4. Toxicity/Mobility	a	10,000
5. Hazardous Waste Quantity	a	100
6. Waste Characteristics	100	32
Targets:		
7. Nearest Well	50	50
8. Population:		
8a. Level I Concentrations	b	890
8b. Level II Concentrations	b	739
8c. Potential Contamination	b	Not Scored
8d. Population (lines 8a + 8b + 8c)	b	1,629
9. Resources	5	Not Scored
10. Wellhead Protection Area	20	Not Scored
11. Targets (lines 7 + 8d + 9 + 10)	b	1,679
GROUND WATER MIGRATION SOURCE FOR AN AQUIFER		
12. Aquifer Source [(lines 3 x 6 x 11)/82,500][c]	100	100
GROUND WATER MIGRATION PATHWAY SCORE		
13. Pathway Score (S_{gw}), (highest value from line 12 for all aquifers evaluated)[c]	100	100

Notes:

[a] Maximum value applies to waste characteristics category

[b] Maximum value not applicable

[c] Do not round to nearest integer

HRS DOCUMENTATION RECORD COVER SHEET

Name of Site: Washington County Lead District-Richwoods

EPA ID No.: **MON000705032**

Contact Persons

EPA Contact: Michelle Quick
U.S. Environnemental Protection Agency, Region 7
901 North 5th Street
Kansas City, Kansas 66101
(913) 551-7335

Site Investigation: David Gray
Tetra Tech EM Inc.

Documentation Record: Stephanie Luebbering
Tetra Tech EM Inc.

Pathways, Components, or Threats Not Scored

The air pathway was not scored for this site. In addition, the ground water to surface component of the surface water migration pathway was not scored because the overland flow component yields a higher score.

The air migration pathway was not a priority for investigation in assessments conducted to date in Washington County. Mining activities ended in the mid 1980s and resulting source areas are now substantially vegetated reducing the threat of particulate migration via airborne dispersion.

HRS DOCUMENTATION RECORD

Name of Site: WASHINGTON COUNTY LEAD DISTRICT-RICHWOODS

EPA Region: 7 Date Prepared: September 2007

Street Address of Site: 21 acres in northeastern portion of Washington County, Missouri

City, County, State: Richwoods, Washington County, Missouri 63071

General Location in the State: The site is located near the eastern Ozark Mountains in southeastern Missouri. The Richwoods site is in east central Washington County and consists of Study Area 10 delineated by EPA Region 7. Within the study area are numerous potential source areas where mining related wastes have been deposited. Six source areas are included in this documentation record. These sources correspond to tailings piles associated with inactive commercial barite mining operations.

Topographic Maps: Richwoods and Fletcher, Missouri

Latitude: (North) Longitude: (West)
38º09'58.14" 90º48'51.35
Ref. 3

The latitude and longitude measurements were determined based on the point in the approximate center of Richwoods Area 10 at the intersection of Highway 47 and Highway A/H (Ref. 3). Figure 1 shows the location of Richwoods.

Scores	
Air Pathway	Not Scored
Ground Water Pathway	100.00
Soil Exposure Pathway	100.00
Surface Water Pathway	60.00
HRS SITE SCORE	76.81

*The street address coordinates, and contaminant locations presented in this HRS documentation record identify the general area of the site's location. They represent one or more locations EPA consider part of the site based on the screening information EPA used to evaluate the site for NPL listing. EPA lists national priorities among the known "releases or threatened releases" of hazardous substances; thus, the focus is on the releases, not precisely delineated boundaries. A site is defined as where a hazardous substance has been "deposited, stored, placed, or otherwise come to be located." Generally, HRS scoring and the subsequent listing of a release merely represent the initial determination that a certain area may need to be addressed under CERCLA. Accordingly, EPA recognizes that the preliminary description of facility boundaries at the time of scoring may be refined as more information is obtained concerning location(s) of contamination.

WORKSHEET FOR COMPUTING HRS SITE SCORE

		S	S^2
1.	Ground Water Migration Pathway Score (S_{gw}) (from Table 3-1, line 13)	100.00	10,000.00
2a.	Surface Water Overland/Flood Migration Component (from Table 4-1, line 30)	60.00	3,600.00
2b.	Ground Water to Surface Water Migration Component (from Table 4-25, line 28)	Not Scored	- -
2c.	Surface Water Migration Pathway Score (S_{sw}) Enter the larger of lines 2a and 2b as the pathway score.	60.00	3,600.00
3.	Soil Exposure Pathway Score (S_s) (from Table 5-1, line 22)	100	10,000.00
4.	Air Migration Pathway Score (S_a) (from Table 6-1, line 12)	Not Scored	- -
5.	Total of $S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2$		23,600.00
6.	**HRS Site Score** Divide the value on line 5 by 4 and take the square root	76.81	

TABLE 3-1.-GROUND WATER MIGRATION PATHWAY SCORESHEET

Factor Categories and Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer:		
1. Observed Release:	550	550
2. Potential to Release:		
2a. Containment	10	Not Scored
2b. Net Precipitation	10	Not Scored
2c. Depth to Aquifer	5	Not Scored
2d. Travel Time	35	Not Scored
2e. Potential to Release [lines 2a x (2b + 2c + 2d)]	500	Not Scored
3. Likelihood of Release (higher of lines 1 and 2e)	550	550
Waste Characteristics:		
4. Toxicity/Mobility	[a]	10,000
5. Hazardous Waste Quantity	[a]	1,000,000
6. Waste Characteristics	100	100
Targets:		
7. Nearest Well	50	50
8. Population:		
8a. Level I Concentrations	[b]	832.8
8b. Level II Concentrations	[b]	49
8c. Potential Contamination	[b]	NS
8d. Population (lines 8a + 8b + 8c)	[b]	881.8
9. Resources	5	Not Scored
10. Wellhead Protection Area	20	Not Scored
11. Targets (lines 7 + 8d + 9 + 10)	[b]	931.8
GROUND WATER MIGRATION SOURCE FOR AN AQUIFER		
12. Aquifer Source [(lines 3 x 6 x 11)/82,500][c]	100	100
GROUND WATER MIGRATION PATHWAY SCORE		
13. Pathway Score (S_{gw}), (highest value from line 12 for all aquifers evaluated)[c]	100	100

[a]Maximum value applies to waste characteristics category.
[b]Maximum value not applicable.
[c]Do not round to nearest integer.

TABLE 4-1.-SURFACE WATER OVERAND/FLOOD MIGRATION COMPONENT SPREADSHEET

Factor Categories and Factors	Maximum Value	Value Assigned
Drinking Water Threat		
Likelihood of Exposure:		
1. Observed Release.	550	550
2. Potential to Release by Overland Flow:		Not Scored
2a. Containment	10	Not Scored
2b. Runoff	25	Not Scored
2c. Distance to Surface Water	25	Not Scored
2d. Potential to Release by Overland Flow (lines 2a[2b+2c])	500	Not Scored
3. Potential to Release by Flood:		Not Scored
3a. Containment (Flood)	10	Not Scored
3b. Flood Frequency	50	Not Scored
3c. Potential to Release by Flood (lines 3a x 3b)	500	Not Scored
4. Potential to Release (lines 2d + 3c, subject to a maximum of 500)	500	Not Scored
5. Likelihood of Release (higher of lines 1 and 4)	550	550
Waste Characteristics:		
6. Toxicity/Persistence	(a)	Not Scored
7. Hazardous Waste Quantity	(a)	Not Scored
8. Waste Characteristics	100	Not Scored
Targets:		
9. Nearest Intake	50	Not Scored
10. Targets (lines 5 + 6c + 7 + 8 + 9)		Not Scored
10a. Level I Concentrations	(b)	Not Scored
10b. Level II Concentrations	(b)	Not Scored
10c. Potential Contamination	(b)	Not Scored
10d. Population (lines 10a + 10b + 10c)	(b)	Not Scored
11. Resources	5	Not Scored
12. Targets (lines 9 + 10d + 11)	(b)	Not Scored
Drinking Water Threat Score:		
13. Drinking Water Threat Score ([lines 5 x 8 x 12]/82,500, subject to maximum of 100)	100	Not Scored
Human Food Chain Threat		
Likelihood of Release:		
14. Likelihood of Release (same value as line 5)	550	550
Waste Characteristics:		
15. Toxicity/Persistence/Bioaccumulation	(a)	Not Scored
16. Hazardous Waste Quantity	(a)	Not Scored
17. Waste Characteristics	1,000	Not Scored
Targets:		
18. Food Chain Individual	50	Not Scored
19. Population	(b)	Not Scored
19a. Level I Concentrations	(b)	Not Scored

Factor Categories and Factors	Maximum Value	Value Assigned
19b. Level II Concentrations	(b)	Not Scored
19c. Potential Human Food Chain Contamination	(b)	Not Scored
19d. Population (lines 19a + 19b + 19c)	(b)	Not Scored
20. Targets (lines 18 + 19)	(b)	Not Scored
Human Food Chain Threat Score:		
21. Human Food Chain Threat Score ([lines 14 x 17 x 20]/82,500, subject to a maximum of 100)	100	Not Scored
Environmental Threat		
Likelihood of Release:		
22. Likelihood of Release (same value as line 5)	550	550
Waste Characteristics:		
23. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	50,000,000
24. Hazardous Waste Quantity	(a)	10,000
25. Waste Characteristics	1,000	560
Targets		
26. Sensitive Environments	(b)	
26a. Level I Concentrations	(b)	0
26b. Level II Concentrations	(b)	75
26c. Potential Contamination	(b)	0
26d. Sensitive Environments (lines 26a + 26b + 26c)	(b)	75
27. Targets (value from line 26d)	(b)	75
Environmental Threat Score:		
28. Environmental Threat Score ([lines 22 x 25 x 27]/82,500, subject to a maximum of 60) Surface Water Overland/Flood Migration Component Score for a Watershed	60	60
29. Watershed Score [c] (lines 13 + 21 + 28, subject to a maximum of 100) Surface Water Overland/Flood Migration Component Score	100	60
30. Component score (S_{of})[c] (highest score from line 29 for all watersheds evaluated, subject to a maximum of 100)	100	60

[a]Maximum value applies to waste characteristics category.
[b]Maximum value not applicable.
[c]Do not round to nearest integer.

TABLE 5-1.-SOIL EXPOSURE PATHWAY SCORESHEET

Factor Categories and Factors	Maximum Value	Value Assigned
Resident Population Threat		
Likelihood of Exposure		
1. Likelihood of Exposure:	550	550
Waste Characteristics:		
2. Toxicity	[a]	10,000
3. Hazardous Waste Quantity	[a]	10,000
4. Waste Characteristics	100	100
Targets:		
5. Resident Individual	50	50
6. Resident Population:		
6a. Level I Concentrations	[b]	46.4
6b. Level II Concentrations	[b]	79.2
6c. Resident Population (lines 6a + 6b)	[b]	125.6
7. Workers	15	Not Scored
8. Resources	5	Not Scored
9. Terrestrial Sensitive Environments	[c]	Not Scored
10. Targets (lines 5 + 6c + 7 + 8 + 9)	[b]	175.6
Resident Population Threat Score:		
11. Resident Population Threat (lines 1 x 4 x 10)	[b]	9,658,000
Nearby Population Threat		
Likelihood of Exposure		
12. Attractiveness/Accessibility	100	Not Scored
13. Area of Contamination	100	Not Scored
14. Likelihood of Exposure	500	Not Scored
Waste Characteristics:		
15. Toxicity	[a]	Not Scored
16. Hazardous Waste Quantity	[a]	Not Scored
17. Waste Characteristics	100	Not Scored
Targets:		
18. Nearby Individual	1	Not Scored
19. Population Within 1 Mile	[b]	Not Scored
20. Targets (lines 18 + 19)	[b]	Not Scored
Nearby Population Threat Score:		
21. Nearby Population Threat (lines 14 x 17 x 20)	[b]	Not Scored
SOIL EXPOSURE PATHWAY SCORE		
22. Soil Exposure Pathway Score[d] (S_g), lines [11 + 21] / 82,500, subject to maximum of 100)	100	100

[a]Maximum value applies to waste characteristics category.
[b]Maximum value not applicable.
[c]No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to maximum of 60.
[d]Do not round to nearest integer.

LIST OF ACRONYMS

amsl	above mean sea level
AOC	Area of contamination
bgs	Below ground surface
cfs	cubic feet per second
DGLS	Division of Geology and Land Survey
EPA	U.S. Environmental Protection Agency
ft	feet
GIS	Geographical Information System
gpm	gallons per minute
HRS	Hazard Ranking System
HWQ	Hazard Waste Quantity
ICP	Inductive coupled plasma
ID	Identification
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDNR	Missouri Department of Natural Resources
µg/L	micrograms per liter
MEGA	Missouri Environmental Geology Atlas
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
ND	not detected
NWI	National Wetland Inventory
PA/SI	Preliminary Assessment/Site Investigation
pCi/L	picoCurries per liter
PPE	Probably point of entry
QAPP	Quality Assurance Project Plan
RSE	Removal Site Evaluation
SCDM	Superfund Chemical Data Matrix
SQL	Sample Quantitation Limit
TDL	Target distance limit
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
XRF	x-ray fluorescence

SITE DESCRIPTION

The Washington County Mining District sites are composed of the releases of hazardous substances, mainly cadmium, lead, and barium, into the environment due to the over 300 years of mining activities. These activities have resulted in the contamination of ground water, surface water, and surface soil at concentrations often well above public health criteria. The mining district encompasses most of the central and northeastern part of Washington County and extends a short distance into Jefferson and St. Francois Counties in the vicinity of the Big River which flows along the north Eastern Edge of Washington County (Ref. 28, pp. 4-5). This district was one of the most productive barite producing areas in the world and produced over 11 million short tons of crude barite ore over an 86 year period from 1885 through 1970 (Ref. 28, p. 5).

The Washington County area can be described as having steep ridges and narrow valleys, being the result of a major uplift event (Refs. 3; 17, p. 3). The event also created an extensive system of faults and fissures not necessarily conforming to the surficial topography locally (Refs. 3; 5, p. 28; 17, p. 3, 4; 18; 30, pp. 2-3). The upper formations in the mining district, the Potosi and Eminence, are dolomites that have become extensively karstic and have outcrops in many areas (Refs. 18; 21; 30, p. 3). Because of this, the surficial aquifers flow mainly through solution channels locally and regionally conform to the topography (Refs. 5, p. 28; 17, pp. 4-5; 30, pp. 2-3). Each valley may constitute individual aquifers in the surficial formations. Deeper formations may have ground water flow that conforms directionally, at least in part, to the fault system (Ref. 40, pp. 21, 23).

The ore is located mainly along fissures and faults in the dolomite layers. The barite and lead ores in Washington County consist of fragments and lumps of these minerals irregularly scattered within the residual clays at or near the ground surface (Ref. 28 p. 6; 30, pp. 1-2). It is theorized that the barite rich clays are accumulated insoluble materials derived from long periods of surface weathering and solution into particular horizons of the dolomite bedrock (Ref. 28, p. 6). The well developed fault and fracture system in the district acted as channel ways for ascending ore-bearing solutions. The solutions then migrated laterally into porous and permeable horizons in the upper Cambrian Potosi and Eminence Dolomites where barite and associated galena (lead) were deposited as runs. The soluble dolominates were eroded over time and replaced with clays leaving the ores in the clay. The ore enriched clays are often capped at the surface by thin layers of barren soil and loess (Ref. 28, p. 6).

The earliest documented mining in Washington County was recorded in the early 18th century and focused on the collection and recovery of near surface lead ores (Ref. 30, p. 1). Early mining operations were conducted by farmers to supplement income and usually consisted of hand dug pits advanced into the residuum over the bedrock (Ref. 30, pp. 1-2). Mining for barite (the ore from which barium is derived) did not occur until after the civil war when barium became economically valuable as a white pigment in paint (Ref. 30, p. 1). In the early 20th century, several thousand people mined barite in Washington County. In 1926, barite mining boomed in Washington County when the mineral was discovered to be useful as a weighting agent in oil drilling mud. Mechanized strip mining did not occur to a great extent until 1924 (Ref. 30, p. 3; 28, p. 7). By the mid 1980s, production started to decline in Washington County due to competition from Nevada and overseas operations (Ref. 30, p. 1).

EPA Region 7 and the State of Missouri Department of Natural Resources are investigating this district to identify impacted residential yards and wells (Ref. 22, pp. 8 and 12). Ongoing, time-critical removal actions are being conducted at properties where lead in soil or ground water exceeds defined action levels (Ref. 22, p. 16). To aid in the management of data and available resources, the barite has been split into

three areas named Potosi, Richwoods, and Old Mines. These areas represent the highest density population areas and are also associated with the largest mining complexes. However, the areas between these areas are also associated with mining related contamination. Over 300 private and public supply wells out of 1,466 sampled in the District by 2006 have elevated lead and or barium levels above public health criteria. The number of people exposed to the contamination in their private and municipal drinking water wells is at least 1,438. The mining related ground water contamination from a regional perspective is ubiquitous throughout the area, but wells with high lead and barium levels can be found within a few hundred feet of wells with no significant contamination (Ref. 5, Figure 5). The pattern of ground water contamination, just as is the location of the mined ore deposits, is a function of the geology, topography, and ground water hydrology.

Contamination has migrated from the mine processing areas into ground water via infiltration by rain on the waste piles and via discharge of the process waters, into surface water via erosion and direct deposition, and most likely into air via wind blown dust and smelter emissions. The tailing piles associated with the larger mining activities cover over 3,502 acres (Ref. 31, p. 10). The ore processing (washing) procedure utilized a tremendous amount of high-pressure water to separate the ore from the clays. Water requirements for a washer were as high as 5,000 gallons per minute (Ref. 28, p.7). In addition, over 910 residences have been built in former mine facility areas and have contaminated soils on their properties.

The actual number, size, and location of all the mines and related waste sources in the Washington County area have not been determined but exceeds 1,400. The State of Missouri maintains a database known as the Inventory of Mines, Occurrences and Prospects (IMOP). As of 2006 in Washington County alone, 1,426 mines or prospects have been identified (Ref. 30, p. 4). The locations of these mines are presented on Reference 52. Figure 2 of Reference 30 shows the location of the mines in the northeast part of Washington County (Ref. 30, p. 8).

For much of the ubiquitous ground water contamination in the Mining District, it is not possible to attribute the contamination to any single mining operation. Because of the extensive mining and large number of individual operations, most wells are downgradient of multiple mines (Figure 2 of this document and Ref. 52). Even for those wells that are relatively close to a major mining facility, the karst conditions and faults in the water bearing formations result in a maze of channels that make it impossible to document with certainty that the contamination is a result of releases from the nearby mine (Ref. 40, p. 19 and 21). For this reason, EPA has focused the site investigations and the HRS evaluations on the aquifers associated with the population centers in the mining district and not on individual mines. However, to best inform the public of the breadth of contamination, EPA has also evaluated the surface water and soil exposure pathways for some of these areas as part of the listing process.

This package presents information pertaining to the area named Washington County Lead District-Richwoods. Within the Richwoods portion of the Washington County Mining District are hundreds of prospects and areas that have been subject to anthropogenic disturbance of the ore body (Figure 2 of this document and Ref. 52). At this time, it is impractical to characterize each potential source area. Therefore, this documentation record characterized some of the larger source areas within the district with maximized the HRS score. At this stage of the investigation it is generally not possible to attribute contamination documented at specific targets back to any of the source areas named in this documentation record. The many smaller source areas, not characterized below, may be contributing to contamination.

The Richwoods area is located in Richwoods, Missouri, and is comprised of Study Area 10, which encompasses approximately 44.86 square miles in the northeastern portion of Washington County, Missouri (see Figure 1 of this document). The area is located approximately 12 miles north of Potosi, Missouri on West State Highway 47 and bisected by Highway H and A vertically (Figure 1 of this

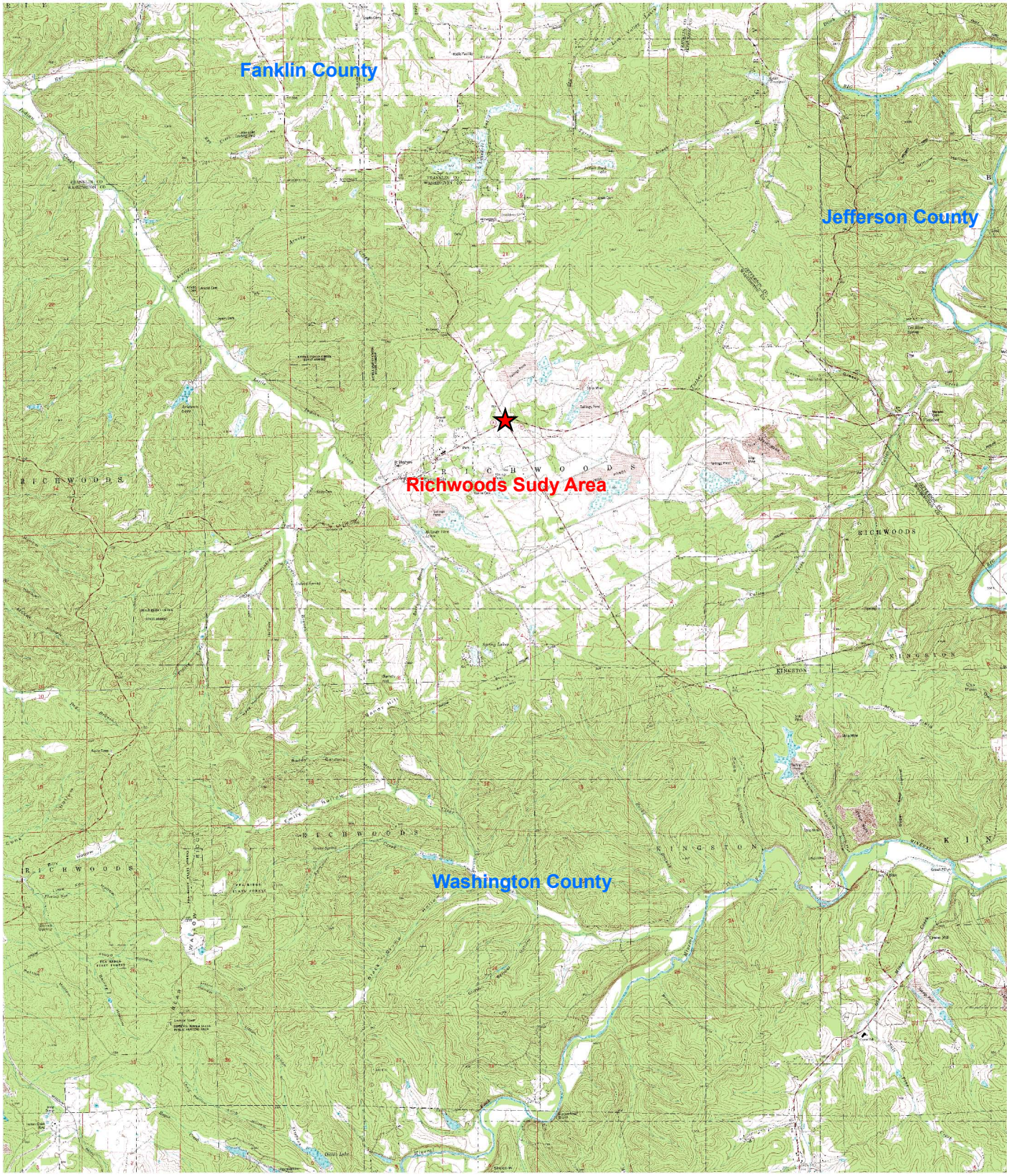
document; Ref. 3). Approximately 23,955 people reside in Washington County and 3,581 people live within a 4-mile radius of Area 10 (Refs. 4, p. 1; 5, p. 6; 24, pp. 1-6). Washington County is bordered on the north by Franklin County, on the east by Jefferson and St. Francois Counties, and on the south by Iron County, and on the west by Crawford County (Refs. 3; 16, p. 2).

Analytical results and x-ray fluorescence (XRF) screening has confirmed significantly elevated levels of lead in ground water and soil. Because the area is so large, the extent of contaminated soils and the ground water contamination has not been fully characterized at this time. Figures 1 and 2 depict the general area and topographic layout of the Richwoods area, and the estimated extent of the site evaluated as part of this deliverable. Area 10 is primarily residential with limited commercial and industrial land use including an auto body shop, gas station, motor cross racing tracks, an active landfill, and others (Ref. 22, p. 6). Large tailings piles associated with past mining activities are visible in the aerial photograph (Ref. 49) and are annotated on the U.S. Geological Survey (USGS) 7.5-minute Quadrangle maps reviewed for the Richwoods area (Ref. 3).

Tailings impoundment dams were commonly constructed for large commercial operations. No known underlying, engineered clay liners are present below any tailings areas at the site. Water-filled subsidence ponds, impoundments, and remnants of mine waste were visible during the 2005 EPA screening and sampling effort (Refs. 5, pp. 43-227; 22, pp. 27-52). Tailings ponds and residences with significantly elevated levels of barium and lead are also present throughout the site.

Drainage in Area 10 is divided. The portion of the Richwoods area west of Highway 47 drains to the Little Indian Creek which eventually leads to the Meramec River. The eastern portion of the site drains to Turkey Creek or a tributary to Calico Creek and both eventually drain to the Big River.

Soil and ground water in the area contains contaminants typically associated with historical mining districts, including barium and lead. Analytical results and XRF screening have confirmed significantly elevated levels of lead in ground water and soil. The historical ground water and soil sampling that occurred within the Richwoods Area 10 is shown on Figures 3 and 4. Lead has been detected above the EPA's action level of 15 parts per billion (ppb) in the surficial aquifer. However, the extent of contaminated soil and ground water has not been fully characterized at this time. Source areas of mining-related contaminants within the Richwoods area included contaminated soils, chat piles, tiff (barite) cuts, and mined pits.



Legend

★ Cross-section of Hwy 47 and Hwy A/H

Richwoods study area

County boundary

N

0 0.5 1 2

Miles

Washington County Lead District
Richwoods Study Area
Washington County, Missouri

Figure 1
Site Location Map

Source: USGS Cyclone Hollow, MO 7.5 Minute Topo Quad, 1969
USGS Ebo, MO 7.5 Minute Topo Quad, 1972
USGS Old Mines, MO 7.5 Minute Topo Quad, 1970
USGS Richwoods, MO 7.5 Minute Topo Quad, 1970

TETRA TECH EM INC.

Date: 05/29/07 Drawn By: Bill Spiking Project No: I9004.L.06.0027.000

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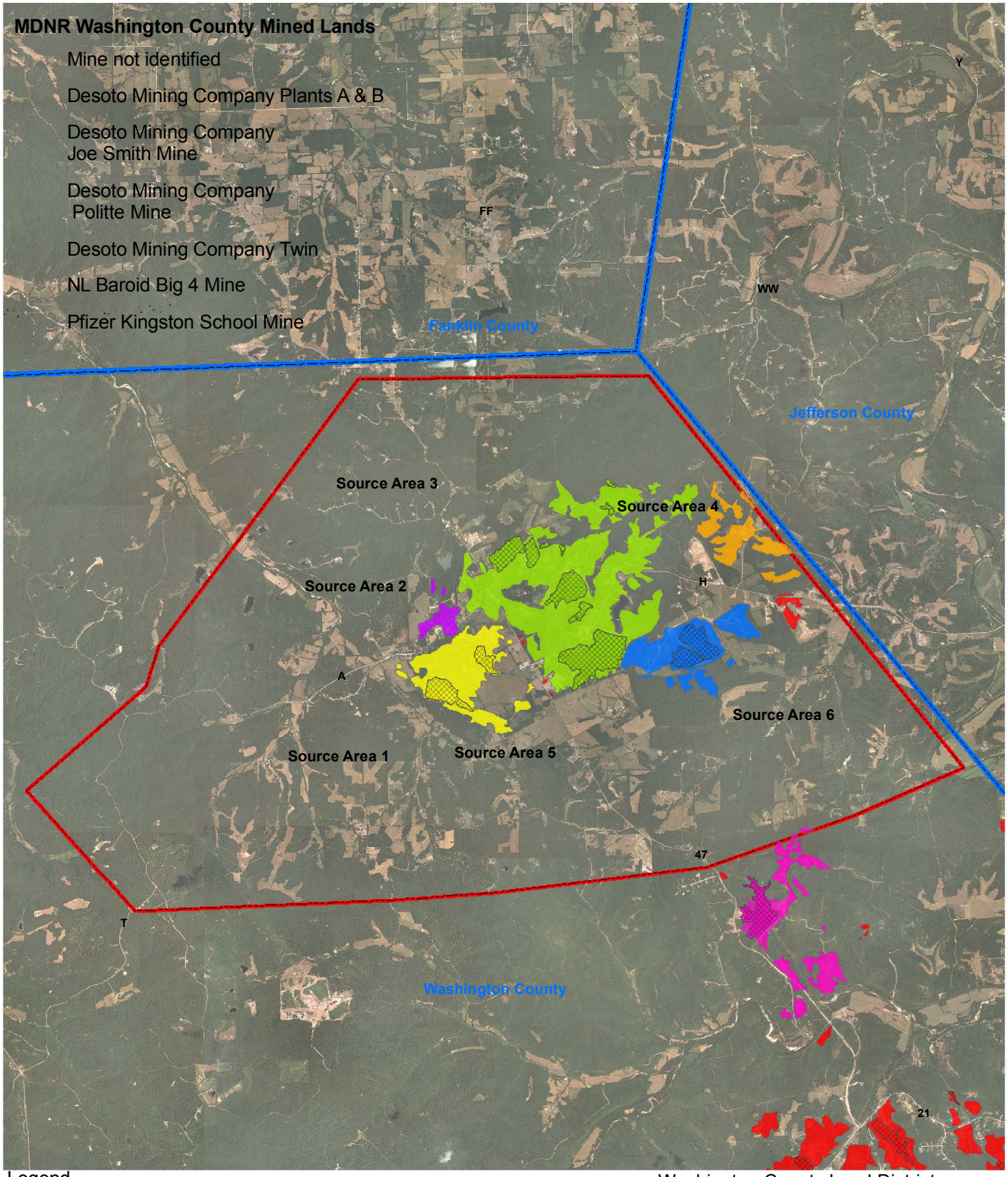

Legend

Cross-section of Hwy 47 and Hwy A/H

State highway

Tailings pond location

Richwoods study area

County boundary

0 0.5 1 2

Miles

Washington County Lead District
Richwoods Study Area
Washington County, Missouri

Figure 2

Source Area Site Location Map

TETRA TECH EM INC.

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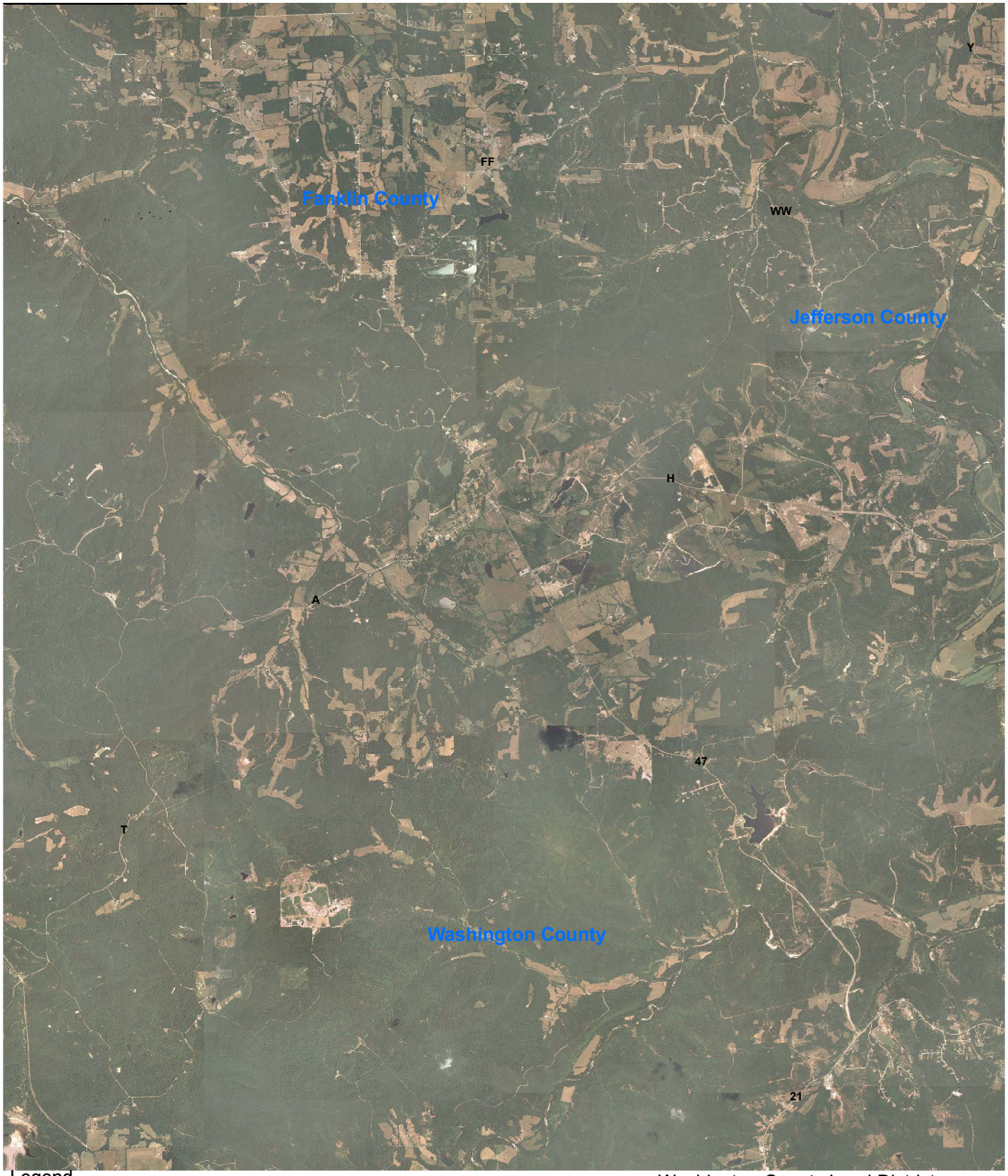
Source: Washington County, MO NAIP Aerial Imagery, 2005

Date: 05/29/07 Drawn By: Bill Spiking Project No: I9004.L.06.0027.000



Legend

Cross-section of Hwy 47 and Hwy A/H

Historical ground water sample location

State highway

Richwoods study area

County boundary

0 0.5 1 2

Miles

Washington County Lead District
Richwoods Study Area
Washington County, Missouri

Figure 3

Historical Ground Water Sample Location Map

TETRA TECH EM INC.

Source: Washington County, MO NAIP Aerial Imagery, 2005

Date: 05/29/07

Drawn By: Bill Spiking

Project No: I9004.L.06.0027.000

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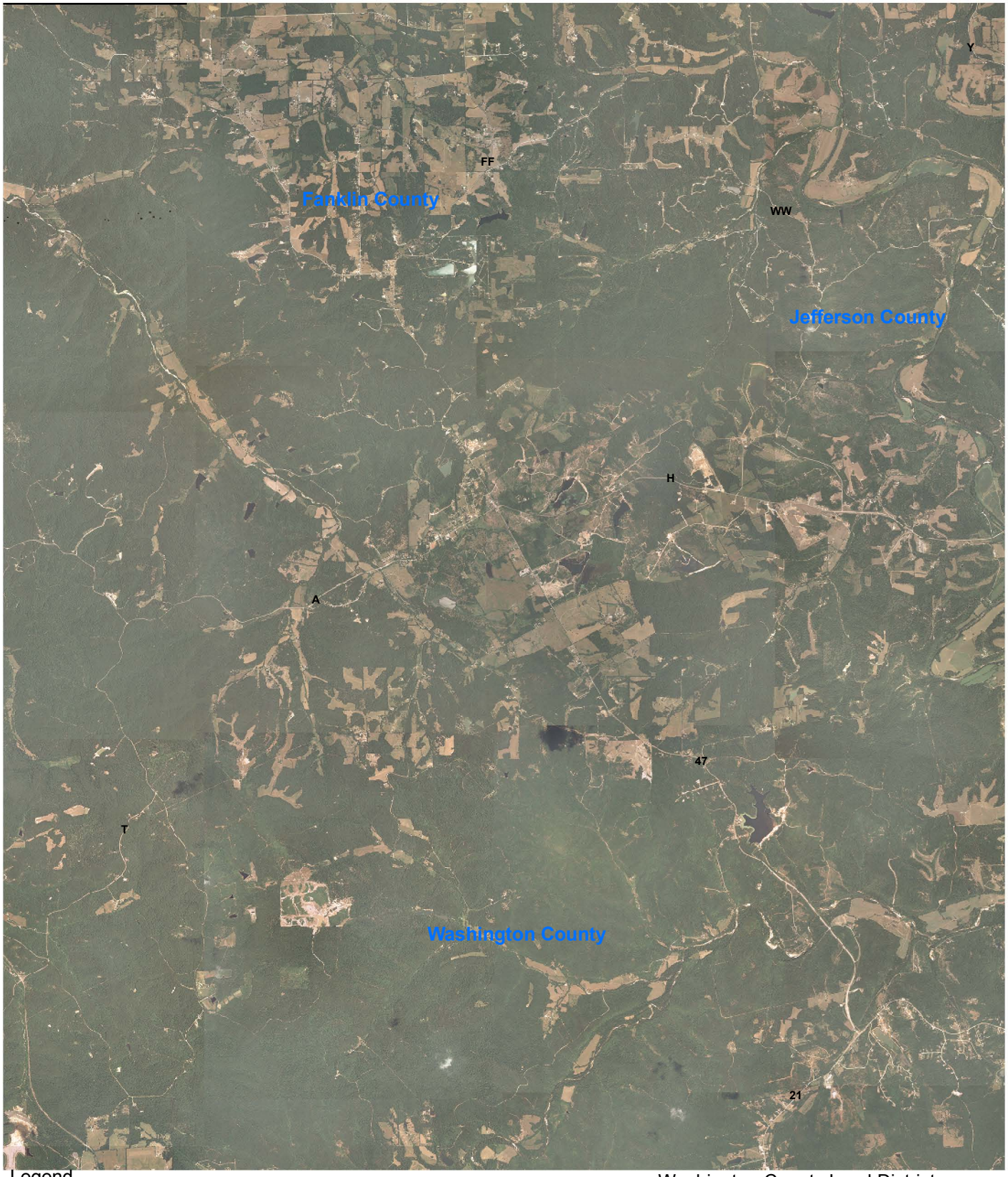

Legend

Cross-section of Hwy 47 and Hwy A/H

Historical soil sample location

State highway

Richwoods study area

County boundary

0 0.5 1 2

Miles

Washington County Lead District
Richwoods Study Area
Washington County, Missouri

Figure 4

Historical Soil
Sample Location Map

TETRA TECH EM INC.

Source: Washington County, MO NAIP Aerial Imagery, 2005

Date: 05/29/07

Drawn By: Bill Spiking

Project No: I9004.L.06.0027.000

X:\G\9004\0027\HRS\projects\Richwoods_HRS_Final\Figure4.mxd

REFERENCES

Reference Number	Description of the Reference
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2	EPA. 2004. "Superfund Chemical Data Matrix." January. Excerpt. 9 Pages.
3	U. S. Geological Survey (USGS). 1981. 7.5 minute series Topographic Quadrangle Maps of Missouri: 1981, Fletcher and Richwoods, Scale 1:24,000. 2 Sheets.
4	U. S. Census Bureau. 2000. Washington County QuickFacts from the U.S. Census Bureau. On-line Address: http://quickfacts.census.gov/qfd/states/29/29221.html. Accessed on May 19, 2006. 2 Pages.
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6	USGS. 2005. Lead Mining History. On-line address: http://mo.water.usgs.gov/mining/minehistory.htm. Accessed on May 19, 2006. 2 Pages.
7	EPA Region 7. 2006. Transmittal of Sample Analysis Results for ASR #2937 for the Washington County Lead District – Richwoods Area. April 24. 138 Pages.
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2.2 SOURCE CHARACTERIZATION

This section presents the known and characterized source areas associated with the site. Documented lead mining in the area dates back over 300 years and has been conducted for most of that period on a small scale by settlers or farmers to supplement income. It was not until the 20th century that mechanized mining in the County gave way to large scale surficial strip mining and processing and the need for constructed tailings ponds as a place to manage the wastes. In Washington County, 67 barite tailings ponds characterized as small, medium, and large were inventoried in 1970 (Ref. 28, pp. 5, 20). In 1981, 3,502 acres of tailings ponds were identified in Washington County (Ref. 31, p. 10). As discussed below, these waste ponds contain elevated concentrations of barium and lead.

Lead mining has occurred in Washington County for hundreds of years (Refs. 6, pp. 1-2; 25, p. 4). The first written record of a lead mine in Missouri was made in 1700 by Father James Gravier, S.J., who noted a lead mining region in what is now Washington County. The first period of continuous lead mining in Missouri began in 1721, when Phillipe Francois Renault brought slave labor into the area north of Potosi in order to mine the surface and near-surface lead ores. Numerous small mines rapidly opened throughout northeastern Washington County, and produced as much as 1,500 pounds of ore per day (Ref. 30, p. 1).

The first mines were mostly surface diggings advanced by manual labor with pick and shovel. In 1763, Mine a' Breton opened at what is now the City of Potosi. The mines throughout this Old Lead Belt area ranged from surface mines to mines that extended several hundred feet below the ground surface (Refs. 6, pp. 1-2; 10, p. 3). By the 1940s, lead reserves in the Old Lead Belt on the eastern side of the St. Francois Mountains were depleted and the exploration for new lead reserves moved to the western side of the Francois Mountains. Lead ore was discovered near Eminence in Shannon County in the late 1950s, and lead ores were discovered in the Viburnum Trend in the 1960s. The Viburnum Trend extends from the southwest corner of Washington County—about 20 to 25 miles southwest of Area 10—southward for about 25 miles (Refs. 6, pp. 1-2; 10, p. 3). Washington County is considered one extensive lead digging site because lead can be found throughout the entire county disturbed from its natural stage. The past success in lead mining in Washington County justified further and deeper exploration in the area (Ref. 29, p. 15). Economic ore bodies are not near the ground surface in this area, but are present at depths ranging from about 500 feet to 1,500 feet below ground surface (bgs) (Ref. 6, pp. 1-2).

Northeastern Washington County is located in the barite mineralization district of Missouri. Barite mining began about 1850 and continued into the 1990s. From 1885 through 1971, Missouri was the leading mine producer of barite in the United States (Refs. 10, pp. 3, 8; 23, pp. 2-3; 25, p. 3; 28, p. 2). The barite deposits in the Washington County area are residual ores contained in red clays derived from weathered bedrock. Lateral distribution of the ore is irregular, occurring in discontinuous streaks that probably represent original concentrations along bedrock fractures or solution features (Ref. 10, pp. 3, 8; 27, p. 2). The well-developed fault and fracture system in Area 10 acted as channelways for the ascending ore-bearing solutions (Refs. 10, pp. 3, 8; 28, p. 6). Early miners tossed the barite aside into waste piles, as it originally had few uses. It became valuable after the Civil War, when it was used as a long-lasting white pigment. Barite mining boomed in 1926, when the mineral was discovered to be a useful weighting agent in oil drilling mud (Refs. 23, pp. 3-4; 30, p. 1). The production of barite in Washington County started to decline in 1985 because of competition in Nevada and overseas (Ref. 30, p. 1).

Mineralization in the sample area is the result of a district-wide mineralizing event. Bodies of mined ore were often defined by availability of land, rather than by the extent of potentially economic ore. Cessation of mining also created artificial boundaries on the edges of mineralization. The scattered nature

of the small mines found between large barite mines in the Washington County (Ref. 30, pp. 2, 8) is likely an artifact of the mining method, rather than due to discontinuities of the ore. The older mining required spacing of the pits and shafts to allow stability of the mines. In addition, in older mining operations most small individual pits and/or shafts were given individual names. Under later mining practices, the entire operation would have been given a single name. These practices create the illusion that there were numerous small ore bodies present during the early days of mining in the district (Ref. 30, p. 2).

In 1972 a report was published by the Missouri Geological Survey & Water Resources which evaluated the barite ore potential of tailings ponds in Washington County (Ref. 28). The intent of the study was to quantify the amount of barite ore in the tailings ponds to determine if it is economically feasible to recover the ore using modern separation techniques (Ref. 28, pp. 2-3). The report summarized that there are large barite reserves present in the district tailings ponds (Ref. 28, pp. 3, 18). As part of the 1972 study, a total of 865 samples were collected and assayed from 185 boreholes collected from four representative tailings ponds (Ref. 28, pp. 10, 12). The average amount of barite in the tailing that was determined for district estimates was 5 percent (Ref. 285, p. 18). Quantitative analysis of low grade composite samples from the four tailings ponds tested indicated trace amounts of lead (Ref. 28, p. 19). This section presents only the tailings ponds in the Richwoods study area where environmental samples were collected in 2006 and analyzed by the US EPA Region 7 laboratory.

Listed sources described below consist only of large tailings piles associated with large mechanized mining operations. These piles are presented by the study area defined by EPA Region 7.

2.2.1 SOURCE IDENTIFICATION

Name of source: Desoto Mining Company Politte Mine South Tailings Pond Number of source: 1
Source Type: Tailings Pile

Description and Location of Source (with reference to a map of the area): This tailings pile is associated with a former barite mine has been assigned a site number of 221-017 by the MDNR, DGLS (Refs. 31, p. 4; 32). This source is evaluated as source type "pile" because it was designed and used as a disposal site for tailings processed by washer plants (Ref. 28, pp. 7-9). These disposal ponds allowed the tailings to dewater. There is no evidence that they were constructed to treat water (Refs. 22, p. 3; 31, p. 4). This source is shown on the Richwoods, Missouri Quadrangles (Figures 2 and 5 of this document; Refs. 3; 32) in the eastern half of Section 32 (projected) of Township 40 north, Range 2 east (Ref. 59, Figure 11; 3; 31, p. 4; 32). Figure 5 on page 37 of this document presents an aerial photograph of the tailings pile with overlays showing the locations of samples collected from the pile as well as the boundaries of the pile defined by the Missouri IMOP database.

Features associated with the tailings pile were mapped by the Missouri DGLS and Department of Environmental Quality in the early 1980s as part of a project referred to as the 208 project. The 208 project was completed in 1982, and it delineated areas of non-coal mined lands, tailings ponds and plant areas. These maps were derived from topographic maps, orthophoto quadrangles and personal communications. The maps were digitized heads-up in GIS software, using the topographic base as a guide. While improving the coverage over that derived from the topographic maps, these maps also pre-dated cessation of barite mining in Washington County (Ref. 30, p. 5). IMOP identified source 1 as being 62 acres of tailings pond covered by water, swampy intermittent water, and trees (Figure 5 of this document; Refs. 31, p. 4; 32).

According to the Missouri Dam Report for Washington County, the tailings pond described above is contained by a dam known as the Little Indian Creek Dam that was completed in 1972. The dam is 58 feet tall and 1,680 feet long. The dam's identification number is MO30718, and its permit number is R-067 (Ref. 44, p. 3). The tailing piles associated with barite mines were designed to receive the overflow from the log washers and jig that separated the barite from the waste gravel. The overflows included waste mud and sand and two-thirds of the barite lost during the mining process was typically discharged into tailing ponds with the slimes (Ref. 28, pp. 7-9). This tailing pile is no longer actively used in the mining process, and no known underlying, engineered clay liner is present below this tailings area (Ref. 22, p. 3; 30, p. 1).

2.2.2 HAZARDOUS SUBSTANCES ASSOCIATED WITH THE SOURCE

EPA conducted additional sampling in August 2006 to identify source areas located in the Richwoods area. *In situ* readings were collected with the XRF for lead concentrations to help delineate the source areas of former tailing piles (Ref. 50, p. 1; 39). The source samples only include samples collected from the former tailings ponds within the mining complexes as shown on Figure 5 of this document. Analytical results and XRF readings have confirmed significantly elevated levels of barium and lead in this source (Ref. 39, pp. 5-12, 19-61). The XRF data collected is not presented because it was not used in the HRS scoring; only the laboratory confirmatory samples are documented below.

Source Samples:

Waste samples from the tailings pond were collected in August 2006 under ASR 3169 and were analyzed for arsenic, barium, cadmium and lead (Figure 5; Refs. 39; 59, Figure 11). Analysis of the tailings samples was conducted by the U.S. EPA Region 7 laboratory in accordance to the site specific QAPP (Refs. 39, p. 5; 51; 65).

Sample ID	Sample Type	Date	Hazardous Substance	Hazardous Substance Concentration (mg/kg)	Sample Quantitation Limit* (mg/kg)	Reference
3169-18	tailings	8/30/06	Barium	5,990	49.0	Refs. 39, pp. 3, 5-6, 11, 38, 63; 43, p. 3
			Lead	1,740	1.23	
3169-19	tailings	8/30/06	Barium	5,310	29.5	Refs. 39, pp. 3, 5-6, 12, 39, 63; 43, p. 3
			Lead	445	1.48	

Notes:

* The SQLs provided in this table are referred to as reporting limits in Reference 43. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are equivalent to a sample quantitation limit.

ID Identification

mg/kg milligrams per kilogram

2.2.3 HAZARDOUS SUBSTANCES AVAILABLE TO A PATHWAY

Containment Description	Containment Factor Value	Reference
Gas release to air: Not Scored	NS	NS
Particulate release to air: Not Scored	NS	NS
Release to ground water: Source 1 has no liner, nor does it have a maintained engineered cover or run on and/or run off control system. In addition, the source also lacks a leachate collection system. The 208 report indicated the source is partially covered in water, trees, and grasses.	10	Ref. 1, Table 3-2; 22, p. 3; 31, p. 4
Release via overland migration and/or flood: Source 1 has no maintained engineered cover or run on and/or run off control system. The 208 report indicated the source is partially covered in water, trees, and grasses.	10	Refs. 1, Table 4-2; 31, p. 4

2.2.4 HAZARDOUS WASTE QUANTITY

2.4.2.1.1. Hazardous Constituent Quantity (Tier A)

The information available is not sufficient to adequately determine Tier A, as required in Section 2.4.2.1.1 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier B, hazardous wastestream quantity (Ref. 1, Section 2.4.2.1.1).

2.4.2.1.2. Hazardous Wastestream Quantity (Tier B)

The information available is not sufficient to adequately determine Tier B, as required in Section 2.4.2.1.2 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier C, volume (Ref. 1, Section 2.4.2.1.2).

2.4.2.1.3. Volume (Tier C)

The information available is not sufficient to adequately determine Tier C, as required in Section 2.4.2.1.3 of the HRS. Assign the source a value of 0 for the volume measure and proceed to evaluate Tier D, area (Ref. 1, Section 2.4.2.1.3).

2.4.2.1.4. Area (Tier D)

Description

According to IMOP the source 1 tailing pond covers 62 acres (Figure 5 of this document). According to the 208 project the tailings pond consists of water, swampy intermittent water, and trees (Refs. 31, p. 4; 32). An acre is equivalent to 43,560 square feet (ft^2). The approximate size of the tailing pile is 2,700,720 ft^2 (62 times 43,560 ft^2).

Source Type	Area	Units	References
Pile	2,700,720	Square feet	Figure 5 of this document; Ref. 32

Sum (ft^2): 2,700,720
Equation for Assigning Value (Ref. 1, Table 2-5): A/13

Area Assigned Value: 207,747.7

2.4.2.1.5. Source Hazardous Waste Quantity Value

Highest assigned value assigned from Table 2-5: 207,747.7

2.2.1 SOURCE IDENTIFICATION

Name of source: Desoto Mining Company Politte Mine North Tailings Pond Number of source: 2
Source Type: Tailings Pile

Description and Location of Source (with reference to a map of the area): This tailings pile is associated with a former barite mine has been assigned a site number of 221-017 by the MDNR, DGLS (Refs. 31, p. 4; 32). This source is evaluated as source type "pile" because it was designed and used as a disposal site for tailings processed by washer plants (Ref. 28, pp. 7-9). These disposal ponds allowed the tailings to dewater. There is no evidence that they were constructed to treat water (Refs. 22, p. 3; 31, p. 4). This source is shown on the Richwoods, Missouri Quadrangles (Refs. 3; 32) in the western half of Section 33 (projected) of Township 40 north, Range 2 east, and the north half of Section 4 (projected) of Township 39 north, Range 2 East (Ref. 59, Figure 11; 3; 31, p. 4; 32). Figure 6 on page 38 of this document presents an aerial photograph of the tailings pile with overlays showing the locations of samples collected from the pile as well as the boundaries of the pile defined by the Missouri IMOP database.

Features associated with the tailings pile were mapped by the Missouri DGLS and Department of Environmental Quality in the early 1980s as part of a project referred to as the 208 project. The 208 project was completed in 1982, and it delineated areas of non-coal mined lands, tailings ponds and plant areas. These maps were derived from topographic maps, orthophoto quadrangles and personal communications. The maps were digitized heads-up in GIS software, using the topographic base as a guide. While improving the coverage over that derived from the topographic maps, these maps also pre-dated cessation of barite mining in Washington County (Ref. 30, p. 5). IMOP identified source 2 as being 28 acres of tailings pond covered by water, swampy intermittent water, and trees (Figure 6 of this document; Refs. 31, p. 4; 32).

According to the Missouri Dam Report for Washington County, the tailings pond described above is contained by a dam known as the Heimos Lake Dam that was completed in 1955. The dam is 37 feet tall and 1,350 feet long. The dam's identification number is MO30999 (Ref. 44, p. 3). The tailing piles associated with barite mines were designed to receive the overflow from the log washers and jig that separated the barite from the waste gravel. The overflows included waste mud and sand and two-thirds of the barite lost during the mining process was typically discharged into tailing ponds with the slimes (Ref. 28, pp. 7-9). This tailing pile is no longer actively used in the mining process, and no known underlying, engineered clay liner is present below this tailings area (Ref. 22, p. 3; 30, p. 1).

2.2.2 HAZARDOUS SUBSTANCES ASSOCIATED WITH THE SOURCE

EPA conducted additional sampling in August 2006 to identify source areas located in the Richwoods area. *In situ* readings were collected with the XRF for lead concentrations to help delineate the source areas of former tailing piles (Refs. 39; 50, p. 1). The source samples only include samples collected from the former tailings ponds within the mining complexes as shown on Figure 6 of this document. Analytical results and XRF readings have confirmed significantly elevated levels of barium and lead in the source (Ref. 39, pp. 5-8). The XRF data collected is not presented because it was not used in the HRS scoring; only the laboratory confirmatory samples are documented below.

Source Samples:

Waste samples from the tailings pond were collected in August 2006 under ASR 3169 and were analyzed for arsenic, barium, cadmium and lead (Figure 6; Refs. 39; 59, Figure 11). Analysis of the tailings samples was conducted by the U.S. EPA Region 7 laboratory in accordance to the site specific QAPP (Refs. 39, p. 5; 51; 65).

Sample ID	Sample Type	Date	Hazardous Substance	Hazardous Substance Concentration (mg/kg)	Sample Quantitation Limit* (mg/kg)	Reference
3169-5	tailings	8/28/06	Barium	6,860	71.3	Refs. 39, pp. 3, 5-6, 8, 23, 63; 43, p. 1
			Lead	4,610	1.19	
3169-6	tailing	8/28/06	Barium	8,100	87.1	Refs. 39, pp. 3, 5-6, 8, 24, 63; 43, p. 1
			Lead	1,160	1.45	

Notes:

* The SQLs provided in this table are referred to as reporting limits in Reference 43. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are equivalent to a sample quantitation limit.

ID Identification

mg/kg milligrams per kilogram

2.2.3 HAZARDOUS SUBSTANCES AVAILABLE TO A PATHWAY

Containment Description	Containment Factor Value	Reference
Gas release to air: Not Scored	NS	NS
Particulate release to air: Not Scored	NS	NS
Release to ground water: Source 2 has no liner, nor does it have a maintained engineered cover or run on and/or run off control system. In addition, the source also lacks a leachate collection system. The 208 report indicated the source is partially covered in water, trees, and grasses.	10	Ref. 1, Table 3-2; 22, p. 3; 31, p. 4
Release via overland migration and/or flood: Source 2 has no maintained engineered cover or run on and/or run off control system. The 208 report indicated the source is partially covered in water, trees, and grasses.	10	Refs. 1, Table 4-2; 31, p. 4

2.2.4 HAZARDOUS WASTE QUANTITY

2.4.2.1.1. Hazardous Constituent Quantity (Tier A)

The information available is not sufficient to adequately determine Tier A, as required in Section 2.4.2.1.1 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier B, hazardous wastestream quantity (Ref. 1, Section 2.4.2.1.1).

2.4.2.1.2. Hazardous Wastestream Quantity (Tier B)

The information available is not sufficient to adequately determine Tier B, as required in Section 2.4.2.1.2 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier C, volume (Ref. 1, Section 2.4.2.1.2).

2.4.2.1.3. Volume (Tier C)

The information available is not sufficient to adequately determine Tier C, as required in Section 2.4.2.1.3 of the HRS. Assign the source a value of 0 for the volume measure and proceed to evaluate Tier D, area (Ref. 1, Section 2.4.2.1.3).

2.4.2.1.4. Area (Tier D)

Description

According to IMOP the source 2 tailing pond covers 28 acres (Figure 6 of this document). According to the 208 project the tailings pond consists of water, swampy intermittent water, and trees (Refs. 31, p. 4; 32). An acre is equivalent to 43,560 square feet (ft^2). The approximate size of the tailing pile is 1,219,680 ft^2 (28 times 43,560 ft^2).

Source Type	Area	Units	References
Pile	1,219,680	Square feet	Figure 6 of this document; Ref. 32

Sum (ft^2): 1,219,680
Equation for Assigning Value (Ref. 1, Table 2-5): A/13

Area Assigned Value: 93,821.5

2.4.2.1.5. Source Hazardous Waste Quantity Value

Highest assigned value assigned from Table 2-5: 93,821.5

2.2.1. SOURCE IDENTIFICATION

Name of source: Desoto Mining Company Plants A & B (Agers) Northwest Tailings Pond Number of source: 3
Source Type: Tailings Pile

Description and Location of Source (with reference to a map of the area): This tailings pile is associated with a former barite mine has been assigned a site number of 221-021 by the MDNR, DGLS (Refs. 31, p. 5; 32). This source is evaluated as source type "pile" because it was designed and used as a disposal site for tailings processed by washer plants (Ref. 28, pp. 7-9). These disposal ponds allowed the tailings to dewater. There is no evidence that they were constructed to treat water (Refs. 22, p. 3; 31, p. 5). This source is shown on the Richwoods, Missouri Quadrangle (Refs. 3; 32) in Section 28 (projected) of Township 40 north, Range 2 east (Ref. 59, Figure 11; 3; 31, p. 5; 32). Figure 7 on page 39 of this document presents an aerial photograph of the tailings pile with overlays showing the locations of samples collected from the pile as well as the boundaries of the pile defined by the Missouri IMOP database.

Features associated with the tailings pile were mapped by the Missouri DGLS and Department of Environmental Quality in the early 1980s as part of a project referred to as the 208 project. The 208 project was completed in 1982, and it delineated areas of non-coal mined lands, tailings ponds and plant areas. These maps were derived from topographic maps, orthophoto quadrangles and personal communications. The maps were digitized heads-up in GIS software, using the topographic base as a guide. While improving the coverage over that derived from the topographic maps, these maps also pre-dated cessation of barite mining in Washington County (Ref. 30, p. 5). IMOP identified source 3 as being 53.8 acres of tailings pond covered by swampy intermittent water and dry and barren land (Figure 7 of this document; Refs. 31, p. 5; 32).

According to the Missouri Dam Report for Washington County, the tailings pond described above is contained by a dam known as Desoto Pit and Plant B Dam that was completed in 1980. The dam is 54 feet tall and 1,360 feet long. The dam's identification number is MO30469 (Ref. 44, p. 2). The tailing piles associated with barite mines were designed to receive the overflow from the log washers and jig that separated the barite from the waste gravel. The overflows included waste mud and sand and two-thirds of the barite lost during the mining process was typically discharged into tailing ponds with the slimes (Ref. 28, pp. 7-9). This tailing pile is no longer actively used in the mining process, and no known underlying, engineered clay liner is present below this tailings area (Ref. 22, p. 3; 30, p. 1).

2.2.2 HAZARDOUS SUBSTANCES ASSOCIATED WITH THE SOURCE

EPA conducted additional sampling in August 2006 to identify source areas located in the Richwoods area. *In situ* readings were collected with the XRF for lead concentrations to help delineate the source areas of former tailing piles (Refs. 39; 50, p. 1). The source samples only include samples collected from the former tailings ponds within the mining complexes as shown on Figure 7 of this document. Analytical results and XRF readings have confirmed significantly elevated levels of barium and lead in the source (Ref. 39, pp. 5-12, 19-61). The XRF data collected is not presented because it was not used in the HRS scoring; only the laboratory confirmatory samples are documented below.

Source Samples:

Waste samples from the tailings pond were collected in August 2006 under ASR 3169 and were analyzed for arsenic, barium, cadmium and lead (Figure 7; Refs. 39; 59, Figure 11). Analysis of the tailings

samples was conducted by the U.S. EPA Region 7 laboratory in accordance to the site specific QAPP (Refs. 39, p. 5; 51; 65).

Sample ID	Sample Type	Date	Hazardous Substance	Hazardous Substance Concentration (mg/kg)	Sample Quantitation Limit* (mg/kg)	Reference
3169-22	tailings	8/31/06	Barium	5,430	48	Refs. 39, pp. 3, 5-6, 12, 42, 63; 43, pp. 3-4
			Lead	632	1.2	

Notes:
* The SQL provided in this table is referred to as the reporting limit in Reference 43. It is the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are equivalent to a sample quantitation limit.
ID Identification
mg/kg milligrams per kilogram

2.2.3 HAZARDOUS SUBSTANCES AVAILABLE TO A PATHWAY

Containment Description	Containment Factor Value	Reference
Gas release to air: Not Scored	NS	NS
Particulate release to air: Not Scored	NS	NS
Release to ground water: Source 3 has no liner, nor does it have a maintained engineered cover or run on and/or run off control system. In addition, the source also lacks a leachate collection system. The 208 report indicated the source is partially covered in water, trees, grassy, or swampy.	10	Ref. 1, Table 3-2; 22, p. 3; 31, p. 5
Release via overland migration and/or flood: Source 3 has no maintained engineered cover or run on and/or run off control system. The 208 report indicated the source is partially covered in water, trees, grassy, or swampy.	10	Refs. 1, Table 4-2; 31, p. 5

2.2.4 HAZARDOUS WASTE QUANTITY

2.4.2.1.1. Hazardous Constituent Quantity (Tier A)

The information available is not sufficient to adequately determine Tier A, as required in Section 2.4.2.1.1 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier B, hazardous wastestream quantity (Ref. 1, Section 2.4.2.1.1).

2.4.2.1.2. Hazardous Wastestream Quantity (Tier B)

The information available is not sufficient to adequately determine Tier B, as required in Section 2.4.2.1.2 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier C, volume (Ref. 1, Section 2.4.2.1.2).

2.4.2.1.3. Volume (Tier C)

The information available is not sufficient to adequately determine Tier C, as required in Section 2.4.2.1.3 of the HRS. Assign the source a value of 0 for the volume measure and proceed to evaluate Tier D, area (Ref. 1, Section 2.4.2.1.3).

2.4.2.1.4. Area (Tier D)

Description

According to IMOP the source 3 tailing pond covers 53.8 acres (Figure 7 of this document). According to the 208 project the tailings pond consists of swampy intermittent water and dry and barren land (Refs. 31, p. 5; 32). An acre is equivalent to 43,560 square feet (ft^2). The approximate size of the tailing pile is 2,343,528 ft^2 (53.8 times 43,560 ft^2).

Source Type	Area	Units	References
Pile	2,343,528	Square feet	Figure 7 of this document; Ref. 32

Sum (ft^2): 2,343,528
Equation for Assigning Value (Ref. 1, Table 2-5): A/13

Area Assigned Value: 180,271.4

2.4.2.1.5. Source Hazardous Waste Quantity Value

Highest assigned value assigned from Table 2-5: 180,271.4

2.2.1. SOURCE IDENTIFICATION

Name of source: Desoto Mining Company Plants A & B (Agers) Central Tailings Pond Number of source: 4
Source Type: Tailings Pile

Description and Location of Source (with reference to a map of the area): This tailings pile is associated with a former barite mine has been assigned a site number of 221-021 by the MDNR, DGLS (Refs. 31, p. 5; 32). This source is evaluated as source type "pile" because it was designed and used as a disposal site for tailings processed by washer plants (Ref. 28, pp. 7-9). These disposal ponds allowed the tailings to dewater. There is no evidence that they were constructed to treat water (Refs. 22, p. 3; 31, p. 5). This source is shown on the Richwoods, Missouri Quadrangle (Refs. 3; 32) in Sections 27 and 28 (projected) of Township 40 north, Range 2 east (Ref. 59, Figure 11; 3; 31, p. 5; 32). Figure 8 on page 40 of this document presents an aerial photograph of the tailings pile with overlays showing the locations of samples collected from the pile as well as the boundaries of the pile defined by the Missouri IMOP database.

Features associated with the tailings pile were mapped by the Missouri DGLS and Department of Environmental Quality in the early 1980s as part of a project referred to as the 208 project. The 208 project was completed in 1982, and it delineated areas of non-coal mined lands, tailings ponds and plant areas. These maps were derived from topographic maps, orthophoto quadrangles and personal communications. The maps were digitized heads-up in GIS software, using the topographic base as a guide. While improving the coverage over that derived from the topographic maps, these maps also pre-dated cessation of barite mining in Washington County (Ref. 30, p. 5). IMOP identified source 4 as being 70 acres of tailings pond covered by water and trees (Figure 8 of this document; Refs. 31, p. 5; 32).

According to the Missouri Dam Report for Washington County, the tailings pond described above is contained by a dam known as Richwoods Mine B Dam that was completed in 1943. The dam is 48 feet tall and 3,700 feet long. The dam's identification number is MO31404 (Ref. 44, p. 5). The tailing piles associated with barite mines were designed to receive the overflow from the log washers and jig that separated the barite from the waste gravel. The overflows included waste mud and sand and two-thirds of the barite lost during the mining process was typically discharged into tailing ponds with the slimes (Ref. 28, pp. 7-9). This tailing pile is no longer actively used in the mining process, and no known underlying, engineered clay liner is present below this tailings area (Ref. 22, p. 3; 30, p. 1).

The Missouri Geological Survey and Water Resources evaluated four large tailing ponds including this tailings pond from the De Soto mine that was formerly owned by Baroid Division, N L Industries (Baroid). Baroid operated the mine and washer plant that utilized the tailings pond from February 1945 to April 1957. It is estimated that approximately five million tons of ore were mined and treated in the washer which yielded approximately 310,000 short tons of barite concentrations (Ref. 28, pp. 5, 13-14, 17-18, 20).

According to the Missouri Geological Survey, Cambrian Potosi Dolomite was exposed in several mine cuts in the vicinity of this tailings pond. It was assumed that the Cambrian Potosi Dolomite was the main source of ore from this area. In addition, quartz druse was identified in the waste gravels. The surface area of this pond was measured to be 35 acres, and impounds a valley that drains eastward into Ditch Creek. At the time of the Missouri Geological Survey investigation the 9-acre depression in the southwest corner of the pond was covered with water most of the year. The 13-acre section directly east was intermittently flooded. The drilling conducted during the investigation was confined to the 13-acre dry section of the pond on the north side near the old washer site. The sampling conducted revealed that the total tonnage of tailings in the pond likely exceeds one million tons (Ref. 28, pp. 13-14).

2.2.2 HAZARDOUS SUBSTANCES ASSOCIATED WITH THE SOURCE

In 1972, a report was published by the Missouri Geological Survey & Water Resources which evaluated the barite ore potential of tailings ponds in Washington County, including those in the Richwoods area. The intent of the study was to quantify the amount of barite ore in the tailings ponds to determine if it is economically feasible to recover the ore using modern separation techniques (Ref. 28, pp 1-3). The report summarized that there are large barite reserves present in the district tailings ponds (Ref. 28, pp. 2, 18).

As part of the study, a total of 865 samples were collected and assayed from 185 boreholes collected from four representative tailings ponds (Ref. 28, pp. 10-12). The average amount of barite in the tailing that was determined for district estimates was 5 percent (Ref. 28, p. 18). Quantitative analysis of low grade composite samples from the four tailings ponds tested indicated trace amounts of lead (Ref. 28, p. 19). This 1972 investigation is being discussed because it documents barium and lead contamination associated with the tailings ponds in general throughout Washington County.

EPA conducted additional sampling in August 2006 to identify source areas located in the Richwoods area. *In situ* readings were collected with the XRF for lead concentrations to help delineate the source areas of former tailing piles (Refs. 39; 50, p. 1). The source samples only include samples collected from the former tailings ponds within the mining complexes as shown on Figure 8 of this document. Analytical results and XRF readings have confirmed significantly elevated levels of barium and lead in the source (Ref. 39, pp. 5-9, 19-61). The XRF data collected is not presented because it was not used in the HRS scoring; only the laboratory confirmatory samples are documented below.

Source Samples:

Waste samples from the tailings pond were collected in August 2006 under ASR 3169 and were analyzed for arsenic, barium, cadmium and lead (Figure 8; Refs. 39; 59, Figure 11). Analysis of the tailings samples was conducted by the U.S. EPA Region 7 laboratory in accordance to the site specific QAPP (Refs. 39, p. 5; 51; 65).

Sample ID	Sample Type	Date	Hazardous Substance	Hazardous Substance Concentration (mg/kg)	Sample Quantitation Limit* (mg/kg)	Reference
3169-9	tailings	8/28/06	Barium	5.190	28.6	Refs. 39, pp. 3, 5-6, 9, 27, 63; 43, p. 2
			Lead	243	1.43	
3169-10	tailings	8/28/06	Barium	10,300	84.5	Refs. 39, pp. 3, 5-6, 9, 28, 63; 43, p. 2
			Lead	968	1.41	
3169-11	tailings	8/28/06	Barium	5,700	71.2	Refs. 39, pp. 3, 5-6, 9, 29, 63; 43, p. 2
			Lead	639	3.56	

Notes:

* The SQLs provided in this table are referred to as reporting limits in Reference 43. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are equivalent to a sample quantitation limit.

ID Identification

mg/kg milligrams per kilogram

2.2.3 HAZARDOUS SUBSTANCES AVAILABLE TO A PATHWAY

Containment Description	Containment Factor Value	Reference
Gas release to air: Not Scored	NS	NS
Particulate release to air: Not Scored	NS	NS
Release to ground water: Source 4 has no liner, nor does it have a maintained engineered cover or run on and/or run off control system. In addition, the source also lacks a leachate collection system. The 208 report indicated the source is partially covered in water, trees, grassy, or swampy.	10	Ref. 1, Table 3-2; 22, p. 3; 31, p. 5
Release via overland migration and/or flood: Source 4 has no maintained engineered cover or run on and/or run off control system. The 208 report indicated the source is partially covered in water, trees, grassy, or swampy.	10	Refs. 1, Table 4-2; 31, p. 5

2.2.4 HAZARDOUS WASTE QUANTITY

2.4.2.1.1. Hazardous Constituent Quantity (Tier A)

The information available is not sufficient to adequately determine Tier A, as required in Section 2.4.2.1.1 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier B, hazardous wastestream quantity (Ref. 1, Section 2.4.2.1.1).

2.4.2.1.2. Hazardous Wastestream Quantity (Tier B)

The information available is not sufficient to adequately determine Tier B, as required in Section 2.4.2.1.2 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier C, volume (Ref. 1, Section 2.4.2.1.2).

2.4.2.1.3. Volume (Tier C)

The information available is not sufficient to adequately determine Tier C, as required in Section 2.4.2.1.3 of the HRS. Assign the source a value of 0 for the volume measure and proceed to evaluate Tier D, area (Ref. 1, Section 2.4.2.1.3).

2.4.2.1.4. Area (Tier D)

Description

According to IMOP the source 4 tailing pond covers 70 acres (Figure 8 of this document). According to the 208 project the tailings pond consists of water and trees (Refs. 31, p. 5; 32). An acre is equivalent to 43,560 square feet (ft^2). The approximate size of the tailing pile is 3,049,200 ft^2 (70 times 43,560 ft^2).

Source Type	Area	Units	References
Pile	3,049,200	Square feet	Figure 8 of this document; Ref. 32

Sum (ft^2): 3,049,200
Equation for Assigning Value (Ref. 1, Table 2-5): A/13

Area Assigned Value: 234,553.8

2.4.2.1.5. Source Hazardous Waste Quantity Value

Highest assigned value assigned from Table 2-5: 234,553.8

2.2.1. SOURCE IDENTIFICATION

Name of source: Desoto Mining Company Plants A & B (Agers) South Tailings Pond Number of source: 5
Source Type: Tailings Pile

Description and Location of Source (with reference to a map of the area): This tailings pile is associated with a former barite mine has been assigned a site number of 221-021 by the MDNR, DGLS (Refs. 31, p. 5; 32). This source is evaluated as source type "pile" because it was designed and used as a disposal site for tailings processed by washer plants (Ref. 28, p. 7-9). These disposal ponds allowed the tailings to dewater. There is no evidence that they were constructed to treat water (Refs. 22, p. 3; 31, p. 5). This source is shown on the Richwoods, Missouri Quadrangle (Refs. 3; 32)in the eastern half of Sections 33 and 34(projected) of Township 40 north, Range 2 east (Ref. 59, Figure 11; 3; 31, p. 5; 32). Figure 9 on page 41 of this document presents an aerial photograph of the tailings pile with overlays showing the locations of samples collected from the pile as well as the boundaries of the pile defined by the Missouri IMOP database.

Features associated with the tailing pile were mapped by the Missouri DGLS and Department of Environmental Quality in the early 1980s as part of a project referred to as the 208 project. The 208 project was completed in 1982, and it delineated areas of non-coal mined lands, tailings ponds and plant areas. These maps were derived from topographic maps, orthophoto quadrangles and personal communications. The maps were digitized heads-up in GIS software, using the topographic base as a guide. While improving the coverage over that derived from the topographic maps, these maps also pre-dated cessation of barite mining in Washington County (Ref. 30, p. 5). IMOP identified source 5 as being 171.6 acres of tailings pond covered by water and trees (Figure 9 of this document; Refs. 31, p. 5; 32).

According to the Missouri Dam Report for Washington County, the tailings pond described above is contained by a dam known as Desoto Mine Pit and Plant A Dam that was completed in 1980. The dam is 78 feet tall and 3,700 feet long. The dam's identification number is MO30468 (Ref. 44, p. 2). The tailing piles associated with barite mines were designed to receive the overflow from the log washers and jig that separated the barite from the waste gravel. The overflows included waste mud and sand and two-thirds of the barite lost during the mining process was typically discharged into tailing ponds with the slimes (Ref. 28, pp. 7-9). This tailing pile is no longer actively used in the mining process, and no known underlying, engineered clay liner is present below this tailings area (Ref. 22, p. 3; 30, p. 1).

2.2.2 HAZARDOUS SUBSTANCES ASSOCIATED WITH THE SOURCE

EPA conducted additional sampling in August 2006 to identify source areas located in the Richwoods area. *In situ* readings were collected with the XRF for lead concentrations to help delineate the source areas of former tailing piles (Refs. 39; 50, p. 1). The source samples only include samples collected from the former tailings ponds within the mining complexes as shown on Figure 9 of this document. Analytical results and XRF readings have confirmed significantly elevated levels of barium and lead in the source (Ref. 39, pp. 5-13, 19-61). The XRF data collected is not presented because it was not used in the HRS scoring; only the laboratory confirmatory samples are documented below.

Source Samples:

Waste samples from the tailings pond were collected in August 2006 under ASR 3169 and were analyzed for arsenic, barium, cadmium and lead (Figure 9; Ref. 39; 59, Figure 11). Analysis of the tailings samples was conducted by the U.S. EPA Region 7 laboratory in accordance to the site specific QAPP (Refs. 39, p. 5; 51; 65).

Sample ID	Sample Type	Date	Hazardous Substance	Hazardous Substance Concentration (mg/kg)	Sample Quantitation Limit* (mg/kg)	Reference
3169-12	tailings	8/30/06	Barium	7,880	62.4	Refs. 39, pp. 3, 5-6, 9, 30, 63; 43, p. 2
			Lead	1,320	1.56	
3169-13	tailings	8/30/06	Barium	8,480	74	Refs. 39, pp. 3, 5-6, 10, 31, 63; 43, p. 2
			Lead	1,230	1.23	
3169-16	tailings	8/30/06	Barium	7,910	74.3	Refs. 39, pp. 3, 5-6, 11, 35, 63; 43, p. 3
			Lead	409	1.24	
3169-23	tailings	8/31/06	Barium	3,700	78.4	Refs. 39, pp. 3, 5-6, 13, 43, 62; 43, p. 4
			Lead	1,070	3.92	

Notes:
* The SQLs provided in this table are referred to as reporting limits in Reference 43. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are equivalent to a sample quantitation limit.
ID Identification
mg/kg milligrams per kilogram

2.2.3 HAZARDOUS SUBSTANCES AVAILABLE TO A PATHWAY

Containment Description	Containment Factor Value	Reference
Gas release to air: Not Scored	NS	NS
Particulate release to air: Not Scored	NS	NS
Release to ground water: Source 5 has no liner, nor does it have a maintained engineered cover or run on and/or run off control system. In addition, the source also lacks a leachate collection system. The 208 report indicated the source is partially covered in water, trees, grassy, or swampy.	10	Ref. 1, Table 3-2; 22, p. 3; 31, p. 5
Release via overland migration and/or flood: Source 5 has no maintained engineered cover or run on and/or run off control system. The 208 report indicated the source is partially covered in water, trees, grassy, or swampy.	10	Refs. 1, Table 4-2; 31, p. 5

2.2.4 HAZARDOUS WASTE QUANTITY

2.4.2.1.1. Hazardous Constituent Quantity (Tier A)

The information available is not sufficient to adequately determine Tier A, as required in Section 2.4.2.1.1 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier B, hazardous wastestream quantity (Ref. 1, Section 2.4.2.1.1).

2.4.2.1.2. Hazardous Wastestream Quantity (Tier B)

The information available is not sufficient to adequately determine Tier B, as required in Section 2.4.2.1.2 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier C, volume (Ref. 1, Section 2.4.2.1.2).

2.4.2.1.3. Volume (Tier C)

The information available is not sufficient to adequately determine Tier C, as required in Section 2.4.2.1.3 of the HRS. Assign the source a value of 0 for the volume measure and proceed to evaluate Tier D, area (Ref. 1, Section 2.4.2.1.3).

2.4.2.1.4. Area (Tier D)

Description

According to IMOP the source 5 tailing pond covers 171.6 acres (Figure 9 of this document). According to the 208 project the tailings pond consists of water and trees (Refs. 31, p. 5; 32). An acre is equivalent to 43,560 square feet (ft^2). The approximate size of the tailing pile is 7,474,896 ft^2 (171.6 times 43,560 ft^2).

Source Type	Area	Units	References
Pile	7,474,896	Square feet	Figure 9 of this document; Ref. 32

Sum (ft^2): 7,474,896
Equation for Assigning Value (Ref. 1, Table 2-5): A/13

Area Assigned Value: 574,992

2.4.2.1.5. Source Hazardous Waste Quantity Value

Highest assigned value assigned from Table 2-5: 574,992

2.2.1 SOURCE IDENTIFICATION

Name of source: N.L. Baroid Big 4 Mine East Tailing Pond Number of source: 6
Source Type: Tailings Pile

Description and Location of Source (with reference to a map of the area): This tailings pile is associated with a former barite mine has been assigned a site number of 221-019 by the MDNR, DGLS (Refs. 31, p. 4; 32). This source is evaluated as source type "pile" because it was designed and used as a disposal site for tailings processed by washer plants (Ref. 28, pp. 7-9). These disposal ponds allowed the tailings to dewater. There is no evidence that they were constructed to treat water (Refs. 22, p. 3; 31, p. 4). This source is shown on the Richwoods, Missouri Quadrangle (Refs. 3; 32) in the eastern half of Section 34 (projected) of Township 40 north, Range 2 east (Ref. 59, Figure 11; 3; 31, p. 4; 32). Figure 10 on page 42 of this document presents an aerial photograph of the tailings pile with overlays showing the locations of samples collected from the pile as well as the boundaries of the pile defined by the Missouri IMOP database.

Features associated with the area were mapped by the Missouri DGLS and department of Environmental Quality in the early 1980s as part of a project referred to as the 208 project. The 208 project was completed in 1982, and it delineated areas of non-coal mined lands, tailings ponds and plant areas. These maps were derived from topographic maps, orthophoto quadrangles and personal communications. The maps were digitized heads-up in GIS software, using the topographic base as a guide. While improving the coverage over that derived from the topographic maps, these maps also pre-dated cessation of barite mining in Washington County (Ref. 30, p. 5). IMOP identified source 6 as being 65.8 acres of tailings pond covered by swampy intermittent water (Figure 10 of this document; Refs. 31, p. 4; 32).

According to the Missouri Dam Report for Washington County, the tailings pond described above is contained by a dam known as Big Four Mine Dam that was completed in 1978. The dam is 73 feet tall and 1,200 feet long. The dam's identification number is MO30729 (Ref. 44, p. 1). The tailing piles associated with barite mines were designed to receive the overflow from the log washers and jig that separated the barite from the waste gravel. The overflows included waste mud and sand and two-thirds of the barite lost during the mining process was typically discharged into tailing ponds with the slimes (Ref. 28, pp. 7-9). This tailing pile is no longer actively used in the mining process, and no known underlying, engineered clay liner is present below this tailings area (Ref. 22, p. 3; 30, p. 1).

2.2.2 HAZARDOUS SUBSTANCES ASSOCIATED WITH THE SOURCE

EPA conducted additional sampling in August 2006 to identify source areas located in the Richwoods area. *In situ* readings were collected with the XRF for lead concentrations to help delineate the source areas of former tailing piles (Refs. 39; 50, p. 1). The source samples only include samples collected from the former tailings ponds within the mining complexes as shown on Figure 10 of this document. Analytical results and XRF readings have confirmed significantly elevated levels of barium and lead in the source (Ref. 39, pp. 5-13, 19-61). The XRF data collected is not presented because it was not used in the HRS scoring; only the laboratory confirmatory samples are documented below.

Source Samples:

Waste samples from the tailings pond were collected in August 2006 under ASR 3169 and were analyzed for arsenic, barium, cadmium and lead (Figure 10; Refs. 39; 59, Figure 11). Analysis of the tailings samples was conducted by the U.S. EPA Region 7 laboratory in accordance to the site specific QAPP (Refs. 39, p. 5; 51; 65).

Sample ID	Sample Type	Date	Hazardous Substance	Hazardous Substance Concentration (mg/kg)	Sample Quantitation Limit* (mg/kg)	Reference
3169-26	tailings	8/31/06	Barium	5,830	58.3	Refs. 39, pp. 3, 5-6, 13, 46, 62; 43, p. 4
			Lead	544	1.46	

Notes:

* The SQLs provided in this table are referred to as reporting limits in Reference 43. They are the laboratory's reporting limit (also known as the method detection limit – see the method for more details) for that analyte with any dilution factor, volume adjustment, or percent solids for that sample analysis taken into account and are equivalent to a sample quantitation limit.

ID Identification

mg/kg milligrams per kilogram

2.2.3 HAZARDOUS SUBSTANCES AVAILABLE TO A PATHWAY

Containment Description	Containment Factor Value	Reference
Gas release to air: Not Scored	NS	NS
Particulate release to air: Not Scored	NS	NS
Release to ground water: Source 6 has no liner, nor does it have a maintained engineered cover or run on and/or run off control system. In addition, the source also lacks a leachate collection system. The 208 report indicated the source is partially covered in water, grasses, or swampy.	10	Ref. 1, Table 3-2; 22, p. 3; 31, p. 4
Release via overland migration and/or flood: Source 6 has no maintained engineered cover or run on and/or run off control system. The 208 report indicated the source is partially covered in water, grasses, or swampy.	10	Refs. 1, Table 4-2; 31, p. 4

2.2.4 HAZARDOUS WASTE QUANTITY

2.4.2.1.1. Hazardous Constituent Quantity (Tier A)

The information available is not sufficient to adequately determine Tier A, as required in Section 2.4.2.1.1 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier B, hazardous wastestream quantity (Ref. 1, Section 2.4.2.1.1).

2.4.2.1.2. Hazardous Wastestream Quantity (Tier B)

The information available is not sufficient to adequately determine Tier B, as required in Section 2.4.2.1.2 of the HRS. As a result, the evaluation of Hazardous Waste Quantity proceeds to evaluate Tier C, volume (Ref. 1, Section 2.4.2.1.2).

2.4.2.1.3. Volume (Tier C)

The information available is not sufficient to adequately determine Tier C, as required in Section 2.4.2.1.3 of the HRS. Assign the source a value of 0 for the volume measure and proceed to evaluate Tier D, area (Ref. 1, Section 2.4.2.1.3).

2.4.2.1.4. Area (Tier D)

Description

According to IMOP the source 6 tailing pond covers 65.8 acres (Figure 10 of this document). According to the 208 project the tailings pond consists of swampy intermittent water (Refs. 31, p. 4; 32). An acre is equivalent to 43,560 square feet (ft^2). The approximate size of the tailing pile is 2,866,248 ft^2 (65.8 times 43,560 ft^2).

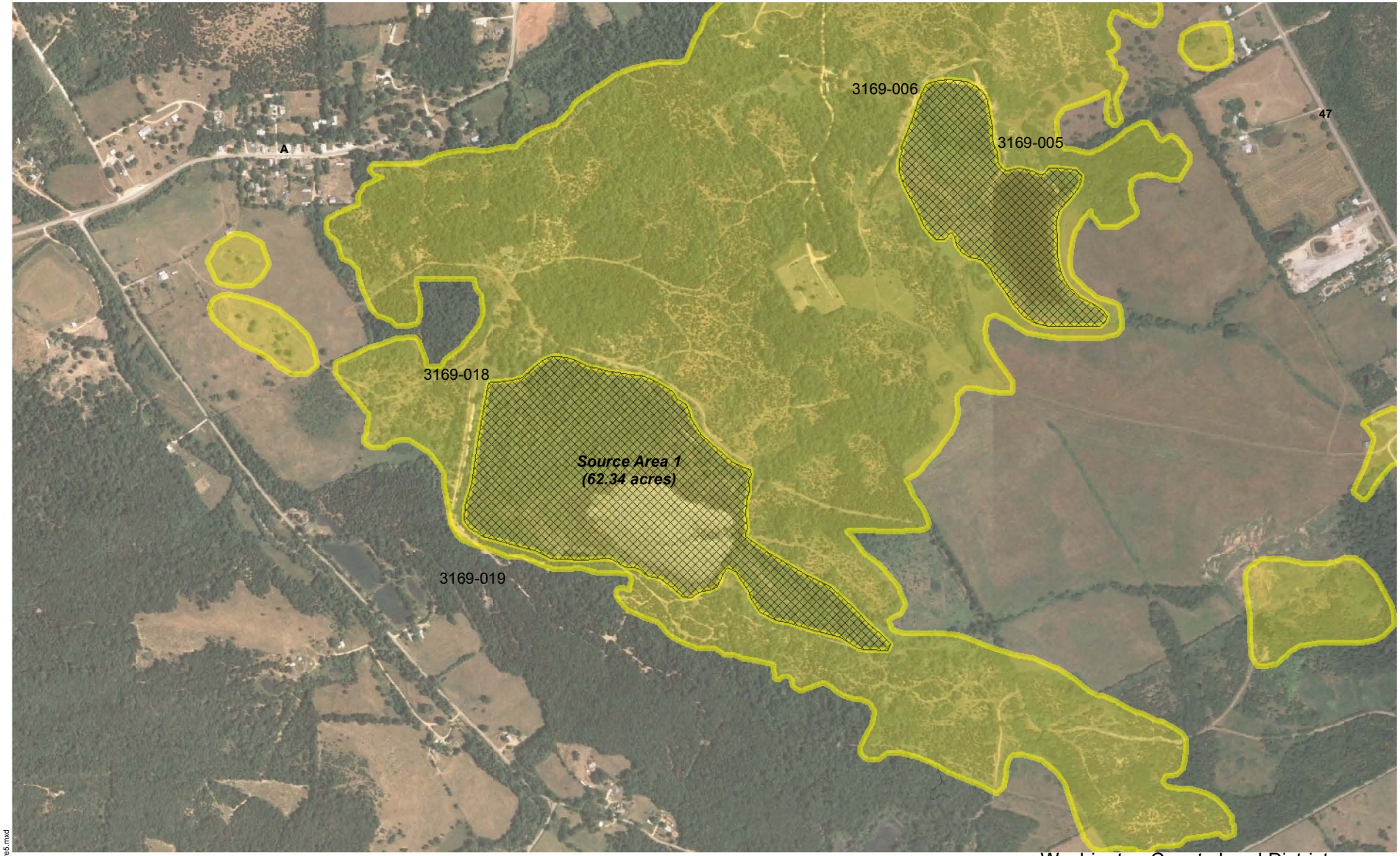
Source Type	Area	Units	References
Pile	2,866,248	Square feet	Figure 10 of this document; Ref. 32

Sum (ft^2): 2,866,248
Equation for Assigning Value (Ref. 1, Table 2-5): A/13

Area Assigned Value: 220,480.6

2.4.2.1.5. Source Hazardous Waste Quantity Value

Highest assigned value assigned from Table 2-5: 220,480.6



Washington County Lead District
Richwoods Study Area
Washington County, Missouri

Figure 5
Source Area 1
Desoto Mining Co. Politte Mine
South Tailings Pond

Legend

Source soil sample location
Wetland soil sample location
State highway
Tailing pond location
Desoto Mining Company Politte Mine

0 500 1,000
Feet

Source: Washington County, MO NAIP Aerial Imagery, 2005

TETRA TECH EM INC.

Date: 03/15/07 Drawn By: Bill Spiking Project No: I9004.L.06.0027.000

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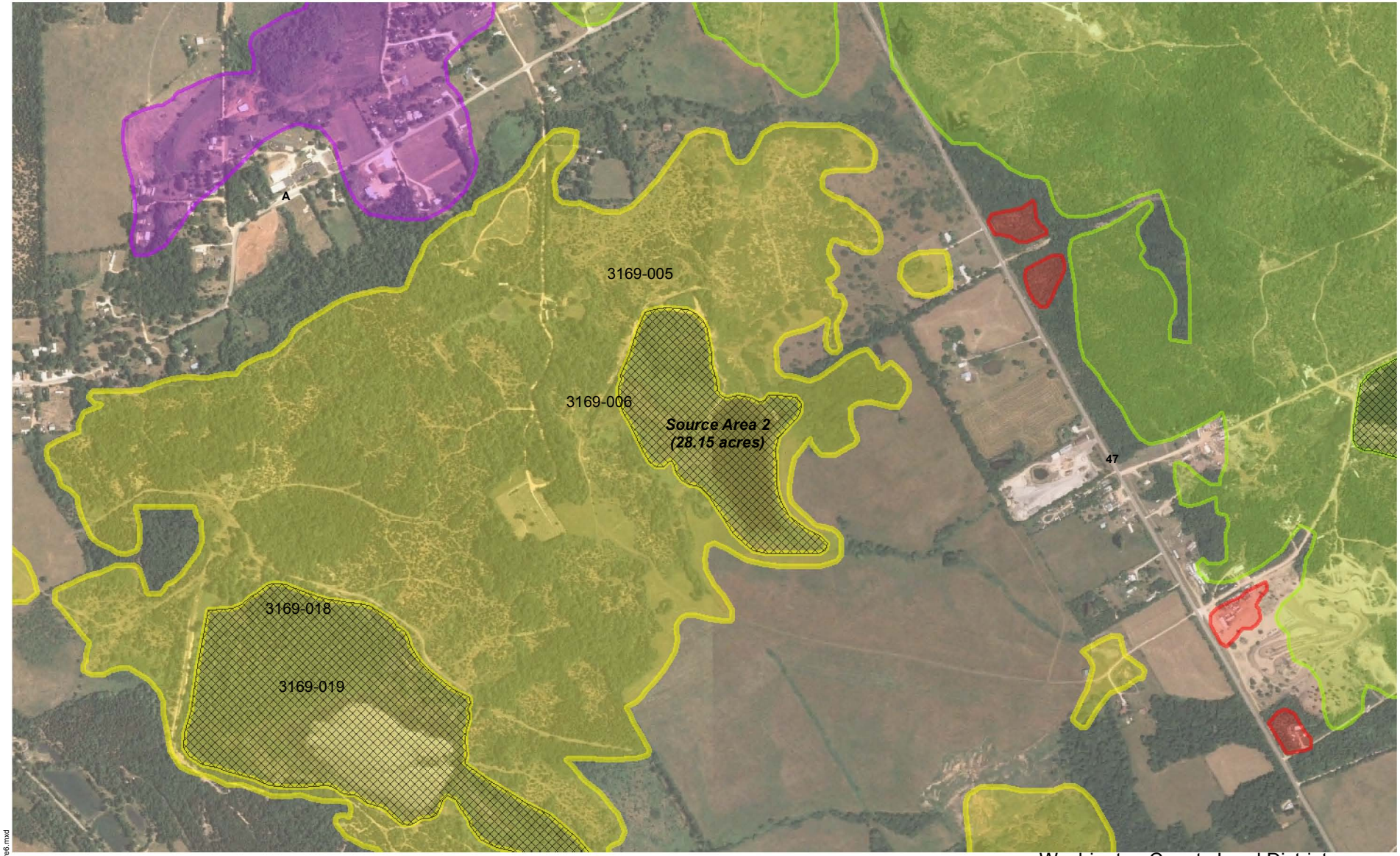

Legend

Source soil sample location

Wetland soil sample location

State highway

Tailing pond location

Mine not identified

Desoto Mining Company Plants A & B

Desoto Mining Company Joe Smith Mine

Desoto Mining Company Politte Mine

0 500 1,000

Feet

Washington County Lead District
Richwoods Study Area
Washington County, Missouri

Figure 6

Source Area 2
Desoto Mining Co. Politte Mine
North Tailings Pond

TETRA TECH EM INC.

Source: Washington County, MO NAIP Aerial Imagery, 2006

Date: 03/15/07 Drawn By: Bill Spiking Project No: I9004.L.06.0027.000

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