000000TABLE 2.4

HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:					*GP06-09*	*GP07-09*	*GP08-09*	*GP09-09*	*GP10-09*
Sample ID:					*A-038443-091609-NH-019*	*A-038443-091609-GL-020*	*A-038443-091709-NH-021*	*A-038443-091509-NH-009*	*A-038443-091509-GL-010*
Sample Date:					*9/16/2009*	*9/16/2009*	*9/17/2009*	*9/15/2009*	*9/15/2009*
	RESIDENTIAL SVSL		*INDUSTRIAL SVSL*						
Parameter	*ELCR*	*HI*	*ELCR*	*HI*					
	a	*b*	c	d					
Volatiles									
1,1,1-Trichloroethane	-	52000	-	220000	1.6 U	55 U	0.93 J	18	14
1,1,2,2-Tetrachloroethane	0.42	-	2.1	-	2.1 U	70 U	2.1 U	2.1 U	2.1 U
1,1,2-Trichloroethane	1.5	2.1	7.7	8.8	1.6 U	55 U	1.6 U	1.6 U	1.6 U
1,1-Dichloroethane	15	-	77	-	1.2 U	41 U	1.2 U	1.2 U	2.1
1,1-Dichloroethene	-	2100	-	8800	0.79 U	40 U	0.79 U	0.79 U	0.79 U
1,2,4-Trichlorobenzene	-	21	-	88	5.9 U	190 U	5.9 U	5.9 U	5.9 U
1,2-Dibromo-3-chloropropane (DBCP)	0.0016	2.1	0.02	8.8	9.7 UJ	490 UJ	9.7 UJ	9.7 UJ	9.7 UJ
1,2-Dibromoethane (Ethylene dibromide)	0.041	94	0.20	390	3.1 U	78 U	3.1 U	3.1 U	3.1 U
1,2-Dichlorobenzene	-	2100	-	8800	2.4 U	61 U	2.4 U	2.4 U	2.4 U
1,2-Dichloroethane	0.94	73	4.7	310	0.81 U	62 U	0.81 U	0.81 U	0.81 U
1,2-Dichloropropane	2.4	42	12	180	0.92 U	70 U	0.92 U	0.92 U	0.92 U
1,3-Dichlorobenzene[w]	2.2	8300	11	35000	2.4 U	120 U	2.0 J	2.4 U	2.4 U
1,4-Dichlorobenzene	2.2	8300	11	35000	2.4 U	120 U	2.4 U	2.4 U	2.4 U
2-Butanone (Methyl ethyl ketone) (MEK)	-	52000	-	220000	2.9 U	150 U	1.9 J	1.5 J	3.2
2-Hexanone	-	310	-	1300	2.0 U	210 U	2.0 U	2.0 U	2.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	-	31000	-	130000	1.6 U	210 U	1.6 U	1.6 U	3.9 J
Acetone	-	320000	-	1400000	7.1 U	120 U	17 UJ	11 U	21 U
Benzene	3.1	310	16	1300	0.96 U	49 U	1.8	1.9	1.7
Bromodichloromethane	0.66	-	3.3	-	2.0 U	68 U	2.0 U	2.0 U	2.0 U
Bromoform	22	-	110	-	4.1 U	100 U	4.1 U	4.1 U	4.1 U
Bromomethane (Methyl bromide)	-	52	-	220	1.6 U	79 U	1.6 U	1.6 U	1.6 U
Carbon disulfide	-	7300	-	31000	6.5	160 U	8.4	13	11
Carbon tetrachloride	4.1	1000	20	4400	1.9 U	64 U	1.9 U	1.9 U	1.9 U
Chlorobenzene	-	520	-	2200	1.4 U	47 U	1.4 U	1.9	1.4 U
Chloroethane	-	100000	-	440000	1.1 U	53 U	1.1 U	1.1 U	1.1 U
Chloroform (Trichloromethane)	1.1	1000	5.3	4300	1.5 U	49 U	1.2 J[a]	14[ac]	4.5[a]
Chloromethane (Methyl chloride)	-	940	-	3900	1.7 U	42 UJ	1.7 U	1.5 J	1.2 J
cis-1,2-Dichloroethene[x]	-	630	-	2600	0.79 U	40 U	0.79 U	1.4	0.79 U
cis-1,3-Dichloropropene[y]	6.1	210	31	880	1.8 U	46 U	1.8 U	1.8 U	1.8 U
Cyclohexane	-	63000	-	260000	1.7 U	35 U	2.1	1.7 U	1.7 U
Dibromochloromethane	0.9	-	4.5	-	3.4 U	86 U	3.4 U	3.4 U	3.4 U
Dichlorodifluoromethane (CFC-12)	-	1000	-	4400	4.0	75 U	63	2.5	24
Ethylbenzene	9.7	10000	49	44000	1.3 U	44 U	4.4	3.2	5.4
Isopropyl benzene	-	4200	-	18000	2.5 U	50 U	2.5 U	2.5 U	2.5 U
Methyl tert butyl ether (MTBE)	94	31000	470	130000	3.6 U	37 U	3.6 U	3.6 U	1.4 J
Methylene chloride	960	6300	12000	26000	1.0 U	19 J	0.55 J	1.0 U	1.0 U
Naphthalene	0.72	31	3.6	130	2.6 U	160 U	2.6 U	3.8[ac]	7.9[ac]
Styrene	-	10000	-	44000	1.7 U	43 U	1.7 U	1.7 U	1.7 U
Tetrachloroethene	94	420	470	1800	1.5 J	69 U	25	120[a]	40
Toluene	-	52000	-	220000	1.1 U	27 J	22	12	18
trans-1,2-Dichloroethene	-	630	-	2600	0.79 U	40 U	0.79 U	0.79 U	0.79 U
trans-1,3-Dichloropropene[y]	6.1	210	31	880	1.8 U	46 UJ	1.8 U	1.8 U	1.8 U
Trichloroethene	4.3	21	30	88	1.0 J	54 U	1.6 J	2000[abcd]	40[abc]
Trichlorofluoromethane (CFC-11)	-	7300	-	31000	8.8	40 J	74	5.2	5.2
Trifluorotrichloroethane (Freon 113)	-	310000	-	1300000	3.8 U	78 U	3.8 U	3.8 U	3.8 U
Vinyl chloride	1.6	1000	28	4400	0.51 U	52 U	0.51 U	0.51 U	0.51 U
Xylenes (total)	-	1000	-	4400	1.3 U	44 U	13	19	30

Notes:

All concentrations are expressed in units of micrograms per cubic meter ($\mu g/m^3$) unless otherwise noted.

J - The parameter was positively identified; however, the associated parameter concentration is estimated.

ELCR - Estimated Lifetime Cancer Risk

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

U - The parameter was not detected. The associated numerical value is the sample quantitation limit.

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[w] = An RSL is not available for 1,3-dichlorobenzene; the RSL for 1,4-dichlorobenzene was considered an evaluation surrogate for 1,3-dichlorobenzene.

000000TABLE 2.4

HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:
Sample ID:
Sample Date:

	RESIDENTIAL SVSL		***INDUSTRIAL SVSL***	
Parameter	***ELCR***	***HI***	***ELCR***	***HI***
	a	***b***	c	d
Volatiles				
1,1,1-Trichloroethane	-	52000	-	220000
1,1,2,2-Tetrachloroethane	0.42	-	2.1	-
1,1,2-Trichloroethane	1.5	2.1	7.7	8.8
1,1-Dichloroethane	15	-	77	-
1,1-Dichloroethene	-	2100	-	8800
1,2,4-Trichlorobenzene	-	21	-	88
1,2-Dibromo-3-chloropropane (DBCP)	0.0016	2.1	0.02	8.8
1,2-Dibromoethane (Ethylene dibromide)	0.041	94	0.20	390
1,2-Dichlorobenzene	-	2100	-	8800
1,2-Dichloroethane	0.94	73	4.7	310
1,2-Dichloropropane	2.4	42	12	180
1,3-Dichlorobenzene[w]	2.2	8300	11	35000
1,4-Dichlorobenzene	2.2	8300	11	35000
2-Butanone (Methyl ethyl ketone) (MEK)	-	52000	-	220000
2-Hexanone	-	310	-	1300
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	-	31000	-	130000
Acetone	-	320000	-	1400000
Benzene	3.1	310	16	1300
Bromodichloromethane	0.66	-	3.3	-
Bromoform	22	-	110	-
Bromomethane (Methyl bromide)	-	52	-	220
Carbon disulfide	-	7300	-	31000
Carbon tetrachloride	4.1	1000	20	4400
Chlorobenzene	-	520	-	2200
Chloroethane	-	100000	-	440000
Chloroform (Trichloromethane)	1.1	1000	5.3	4300
Chloromethane (Methyl chloride)	-	940	-	3900
cis-1,2-Dichloroethene[x]	-	630	-	2600
cis-1,3-Dichloropropene[y]	6.1	210	31	880
Cyclohexane	-	63000	-	260000
Dibromochloromethane	0.9	-	4.5	-
Dichlorodifluoromethane (CFC-12)	-	1000	-	4400
Ethylbenzene	9.7	10000	49	44000
Isopropyl benzene	-	4200	-	18000
Methyl tert butyl ether (MTBE)	94	31000	470	130000
Methylene chloride	960	6300	12000	26000
Naphthalene	0.72	31	3.6	130
Styrene	-	10000	-	44000
Tetrachloroethene	94	420	470	1800
Toluene	-	52000	-	220000
trans-1,2-Dichloroethene	-	630	-	2600
trans-1,3-Dichloropropene[y]	6.1	210	31	880
Trichloroethene	4.3	21	30	88
Trichlorofluoromethane (CFC-11)	-	7300	-	31000
Trifluorotrichloroethane (Freon 113)	-	310000	-	1300000
Vinyl chloride	1.6	1000	28	4400
Xylenes (total)	-	1000	-	4400

Notes:

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[w] = An RSL is not available for 1,3-dichlorobenzene; the RSL for 1,4-dichlorobenzene was considered an evaluation surrogate for 1,3-dichlorobenzene.

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HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:
Sample ID:
Sample Date:

	RESIDENTIAL SVSL		***INDUSTRIAL SVSL***	
Parameter	***ELCR***	***HI***	***ELCR***	***HI***
	a	***b***	c	d
Volatiles				
1,1,1-Trichloroethane	-	52000	-	220000
1,1,2,2-Tetrachloroethane	0.42	-	2.1	-
1,1,2-Trichloroethane	1.5	2.1	7.7	8.8
1,1-Dichloroethane	15	-	77	-
1,1-Dichloroethene	-	2100	-	8800
1,2,4-Trichlorobenzene	-	21	-	88
1,2-Dibromo-3-chloropropane (DBCP)	0.0016	2.1	0.02	8.8
1,2-Dibromoethane (Ethylene dibromide)	0.041	94	0.20	390
1,2-Dichlorobenzene	-	2100	-	8800
1,2-Dichloroethane	0.94	73	4.7	310
1,2-Dichloropropane	2.4	42	12	180
1,3-Dichlorobenzene[w]	2.2	8300	11	35000
1,4-Dichlorobenzene	2.2	8300	11	35000
2-Butanone (Methyl ethyl ketone) (MEK)	-	52000	-	220000
2-Hexanone	-	310	-	1300
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	-	31000	-	130000
Acetone	-	320000	-	1400000
Benzene	3.1	310	16	1300
Bromodichloromethane	0.66	-	3.3	-
Bromoform	22	-	110	-
Bromomethane (Methyl bromide)	-	52	-	220
Carbon disulfide	-	7300	-	31000
Carbon tetrachloride	4.1	1000	20	4400
Chlorobenzene	-	520	-	2200
Chloroethane	-	100000	-	440000
Chloroform (Trichloromethane)	1.1	1000	5.3	4300
Chloromethane (Methyl chloride)	-	940	-	3900
cis-1,2-Dichloroethene[x]	-	630	-	2600
cis-1,3-Dichloropropene[y]	6.1	210	31	880
Cyclohexane	-	63000	-	260000
Dibromochloromethane	0.9	-	4.5	-
Dichlorodifluoromethane (CFC-12)	-	1000	-	4400
Ethylbenzene	9.7	10000	49	44000
Isopropyl benzene	-	4200	-	18000
Methyl tert butyl ether (MTBE)	94	31000	470	130000
Methylene chloride	960	6300	12000	26000
Naphthalene	0.72	31	3.6	130
Styrene	-	10000	-	44000
Tetrachloroethene	94	420	470	1800
Toluene	-	52000	-	220000
trans-1,2-Dichloroethene	-	630	-	2600
trans-1,3-Dichloropropene[y]	6.1	210	31	880
Trichloroethene	4.3	21	30	88
Trichlorofluoromethane (CFC-11)	-	7300	-	31000
Trifluorotrichloroethane (Freon 113)	-	310000	-	1300000
Vinyl chloride	1.6	1000	28	4400
Xylenes (total)	-	1000	-	4400

Notes:

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Sample Location:
Sample ID:
Sample Date:

	RESIDENTIAL SVSL		***INDUSTRIAL SVSL***	
Parameter	***ELCR***	***HI***	***ELCR***	***HI***
	a	***b***	c	d
Volatiles				
1,1,1-Trichloroethane	-	52000	-	220000
1,1,2,2-Tetrachloroethane	0.42	-	2.1	-
1,1,2-Trichloroethane	1.5	2.1	7.7	8.8
1,1-Dichloroethane	15	-	77	-
1,1-Dichloroethene	-	2100	-	8800
1,2,4-Trichlorobenzene	-	21	-	88
1,2-Dibromo-3-chloropropane (DBCP)	0.0016	2.1	0.02	8.8
1,2-Dibromoethane (Ethylene dibromide)	0.041	94	0.20	390
1,2-Dichlorobenzene	-	2100	-	8800
1,2-Dichloroethane	0.94	73	4.7	310
1,2-Dichloropropane	2.4	42	12	180
1,3-Dichlorobenzene[w]	2.2	8300	11	35000
1,4-Dichlorobenzene	2.2	8300	11	35000
2-Butanone (Methyl ethyl ketone) (MEK)	-	52000	-	220000
2-Hexanone	-	310	-	1300
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	-	31000	-	130000
Acetone	-	320000	-	1400000
Benzene	3.1	310	16	1300
Bromodichloromethane	0.66	-	3.3	-
Bromoform	22	-	110	-
Bromomethane (Methyl bromide)	-	52	-	220
Carbon disulfide	-	7300	-	31000
Carbon tetrachloride	4.1	1000	20	4400
Chlorobenzene	-	520	-	2200
Chloroethane	-	100000	-	440000
Chloroform (Trichloromethane)	1.1	1000	5.3	4300
Chloromethane (Methyl chloride)	-	940	-	3900
cis-1,2-Dichloroethene[x]	-	630	-	2600
cis-1,3-Dichloropropene[y]	6.1	210	31	880
Cyclohexane	-	63000	-	260000
Dibromochloromethane	0.9	-	4.5	-
Dichlorodifluoromethane (CFC-12)	-	1000	-	4400
Ethylbenzene	9.7	10000	49	44000
Isopropyl benzene	-	4200	-	18000
Methyl tert butyl ether (MTBE)	94	31000	470	130000
Methylene chloride	960	6300	12000	26000
Naphthalene	0.72	31	3.6	130
Styrene	-	10000	-	44000
Tetrachloroethene	94	420	470	1800
Toluene	-	52000	-	220000
trans-1,2-Dichloroethene	-	630	-	2600
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Trifluorotrichloroethane (Freon 113)	-	310000	-	1300000
Vinyl chloride	1.6	1000	28	4400
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	a	***b***	c	d
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2-Hexanone	-	310	-	1300
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	-	31000	-	130000
Acetone	-	320000	-	1400000
Benzene	3.1	310	16	1300
Bromodichloromethane	0.66	-	3.3	-
Bromoform	22	-	110	-
Bromomethane (Methyl bromide)	-	52	-	220
Carbon disulfide	-	7300	-	31000
Carbon tetrachloride	4.1	1000	20	4400
Chlorobenzene	-	520	-	2200
Chloroethane	-	100000	-	440000
Chloroform (Trichloromethane)	1.1	1000	5.3	4300
Chloromethane (Methyl chloride)	-	940	-	3900
cis-1,2-Dichloroethene[x]	-	630	-	2600
cis-1,3-Dichloropropene[y]	6.1	210	31	880
Cyclohexane	-	63000	-	260000
Dibromochloromethane	0.9	-	4.5	-
Dichlorodifluoromethane (CFC-12)	-	1000	-	4400
Ethylbenzene	9.7	10000	49	44000
Isopropyl benzene	-	4200	-	18000
Methyl tert butyl ether (MTBE)	94	31000	470	130000
Methylene chloride	960	6300	12000	26000
Naphthalene	0.72	31	3.6	130
Styrene	-	10000	-	44000
Tetrachloroethene	94	420	470	1800
Toluene	-	52000	-	220000
trans-1,2-Dichloroethene	-	630	-	2600
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Trichloroethene	4.3	21	30	88
Trichlorofluoromethane (CFC-11)	-	7300	-	31000
Trifluorotrichloroethane (Freon 113)	-	310000	-	1300000
Vinyl chloride	1.6	1000	28	4400
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[w] = An RSL is not available for 1,3-dichlorobenzene; the RSL for 1,4-dichlorobenzene was considered an evaluation surrogate for 1,3-dichlorobenzene.

000000TABLE 2.4

HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:
Sample ID:
Sample Date:

	RESIDENTIAL SVSL		***INDUSTRIAL SVSL***	
Parameter	***ELCR***	***HI***	***ELCR***	***HI***
	a	***b***	c	d
Volatiles				
1,1,1-Trichloroethane	-	52000	-	220000
1,1,2,2-Tetrachloroethane	0.42	-	2.1	-
1,1,2-Trichloroethane	1.5	2.1	7.7	8.8
1,1-Dichloroethane	15	-	77	-
1,1-Dichloroethene	-	2100	-	8800
1,2,4-Trichlorobenzene	-	21	-	88
1,2-Dibromo-3-chloropropane (DBCP)	0.0016	2.1	0.02	8.8
1,2-Dibromoethane (Ethylene dibromide)	0.041	94	0.20	390
1,2-Dichlorobenzene	-	2100	-	8800
1,2-Dichloroethane	0.94	73	4.7	310
1,2-Dichloropropane	2.4	42	12	180
1,3-Dichlorobenzene[w]	2.2	8300	11	35000
1,4-Dichlorobenzene	2.2	8300	11	35000
2-Butanone (Methyl ethyl ketone) (MEK)	-	52000	-	220000
2-Hexanone	-	310	-	1300
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	-	31000	-	130000
Acetone	-	320000	-	1400000
Benzene	3.1	310	16	1300
Bromodichloromethane	0.66	-	3.3	-
Bromoform	22	-	110	-
Bromomethane (Methyl bromide)	-	52	-	220
Carbon disulfide	-	7300	-	31000
Carbon tetrachloride	4.1	1000	20	4400
Chlorobenzene	-	520	-	2200
Chloroethane	-	100000	-	440000
Chloroform (Trichloromethane)	1.1	1000	5.3	4300
Chloromethane (Methyl chloride)	-	940	-	3900
cis-1,2-Dichloroethene[x]	-	630	-	2600
cis-1,3-Dichloropropene[y]	6.1	210	31	880
Cyclohexane	-	63000	-	260000
Dibromochloromethane	0.9	-	4.5	-
Dichlorodifluoromethane (CFC-12)	-	1000	-	4400
Ethylbenzene	9.7	10000	49	44000
Isopropyl benzene	-	4200	-	18000
Methyl tert butyl ether (MTBE)	94	31000	470	130000
Methylene chloride	960	6300	12000	26000
Naphthalene	0.72	31	3.6	130
Styrene	-	10000	-	44000
Tetrachloroethene	94	420	470	1800
Toluene	-	52000	-	220000
trans-1,2-Dichloroethene	-	630	-	2600
trans-1,3-Dichloropropene[y]	6.1	210	31	880
Trichloroethene	4.3	21	30	88
Trichlorofluoromethane (CFC-11)	-	7300	-	31000
Trifluorotrichloroethane (Freon 113)	-	310000	-	1300000
Vinyl chloride	1.6	1000	28	4400
Xylenes (total)	-	1000	-	4400

Notes:

All concentrations are expressed in units of micrograms per cubic meter ($\mu g/m^3$) unless otherwise noted.

J - The parameter was positively identified; however, the associated parameter concentration is estimated.

ELCR - Estimated Lifetime Cancer Risk

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[w] = An RSL is not available for 1,3-dichlorobenzene; the RSL for 1,4-dichlorobenzene was considered an evaluation surrogate for 1,3-dichlorobenzene.

000000TABLE 2.4

HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:
Sample ID:
Sample Date:

	RESIDENTIAL SVSL		***INDUSTRIAL SVSL***	
Parameter	***ELCR***	***HI***	***ELCR***	***HI***
	a	***b***	c	d
Volatiles				
1,1,1-Trichloroethane	-	52000	-	220000
1,1,2,2-Tetrachloroethane	0.42	-	2.1	-
1,1,2-Trichloroethane	1.5	2.1	7.7	8.8
1,1-Dichloroethane	15	-	77	-
1,1-Dichloroethene	-	2100	-	8800
1,2,4-Trichlorobenzene	-	21	-	88
1,2-Dibromo-3-chloropropane (DBCP)	0.0016	2.1	0.02	8.8
1,2-Dibromoethane (Ethylene dibromide)	0.041	94	0.20	390
1,2-Dichlorobenzene	-	2100	-	8800
1,2-Dichloroethane	0.94	73	4.7	310
1,2-Dichloropropane	2.4	42	12	180
1,3-Dichlorobenzene[w]	2.2	8300	11	35000
1,4-Dichlorobenzene	2.2	8300	11	35000
2-Butanone (Methyl ethyl ketone) (MEK)	-	52000	-	220000
2-Hexanone	-	310	-	1300
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	-	31000	-	130000
Acetone	-	320000	-	1400000
Benzene	3.1	310	16	1300
Bromodichloromethane	0.66	-	3.3	-
Bromoform	22	-	110	-
Bromomethane (Methyl bromide)	-	52	-	220
Carbon disulfide	-	7300	-	31000
Carbon tetrachloride	4.1	1000	20	4400
Chlorobenzene	-	520	-	2200
Chloroethane	-	100000	-	440000
Chloroform (Trichloromethane)	1.1	1000	5.3	4300
Chloromethane (Methyl chloride)	-	940	-	3900
cis-1,2-Dichloroethene[x]	-	630	-	2600
cis-1,3-Dichloropropene[y]	6.1	210	31	880
Cyclohexane	-	63000	-	260000
Dibromochloromethane	0.9	-	4.5	-
Dichlorodifluoromethane (CFC-12)	-	1000	-	4400
Ethylbenzene	9.7	10000	49	44000
Isopropyl benzene	-	4200	-	18000
Methyl tert butyl ether (MTBE)	94	31000	470	130000
Methylene chloride	960	6300	12000	26000
Naphthalene	0.72	31	3.6	130
Styrene	-	10000	-	44000
Tetrachloroethene	94	420	470	1800
Toluene	-	52000	-	220000
trans-1,2-Dichloroethene	-	630	-	2600
trans-1,3-Dichloropropene[y]	6.1	210	31	880
Trichloroethene	4.3	21	30	88
Trichlorofluoromethane (CFC-11)	-	7300	-	31000
Trifluorotrichloroethane (Freon 113)	-	310000	-	1300000
Vinyl chloride	1.6	1000	28	4400
Xylenes (total)	-	1000	-	4400

Notes:

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[w] = An RSL is not available for 1,3-dichlorobenzene; the RSL for 1,4-dichlorobenzene was considered an evaluation surrogate for 1,3-dichlorobenzene.

000000TABLE 2.4

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OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:
Sample ID:
Sample Date:

	RESIDENTIAL SVSL		***INDUSTRIAL SVSL***	
Parameter	***ELCR***	***HI***	***ELCR***	***HI***
	a	***b***	c	d
Volatiles				
1,1,1-Trichloroethane	-	52000	-	220000
1,1,2,2-Tetrachloroethane	0.42	-	2.1	-
1,1,2-Trichloroethane	1.5	2.1	7.7	8.8
1,1-Dichloroethane	15	-	77	-
1,1-Dichloroethene	-	2100	-	8800
1,2,4-Trichlorobenzene	-	21	-	88
1,2-Dibromo-3-chloropropane (DBCP)	0.0016	2.1	0.02	8.8
1,2-Dibromoethane (Ethylene dibromide)	0.041	94	0.20	390
1,2-Dichlorobenzene	-	2100	-	8800
1,2-Dichloroethane	0.94	73	4.7	310
1,2-Dichloropropane	2.4	42	12	180
1,3-Dichlorobenzene[w]	2.2	8300	11	35000
1,4-Dichlorobenzene	2.2	8300	11	35000
2-Butanone (Methyl ethyl ketone) (MEK)	-	52000	-	220000
2-Hexanone	-	310	-	1300
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Acetone	-	320000	-	1400000
Benzene	3.1	310	16	1300
Bromodichloromethane	0.66	-	3.3	-
Bromoform	22	-	110	-
Bromomethane (Methyl bromide)	-	52	-	220
Carbon disulfide	-	7300	-	31000
Carbon tetrachloride	4.1	1000	20	4400
Chlorobenzene	-	520	-	2200
Chloroethane	-	100000	-	440000
Chloroform (Trichloromethane)	1.1	1000	5.3	4300
Chloromethane (Methyl chloride)	-	940	-	3900
cis-1,2-Dichloroethene[x]	-	630	-	2600
cis-1,3-Dichloropropene[y]	6.1	210	31	880
Cyclohexane	-	63000	-	260000
Dibromochloromethane	0.9	-	4.5	-
Dichlorodifluoromethane (CFC-12)	-	1000	-	4400
Ethylbenzene	9.7	10000	49	44000
Isopropyl benzene	-	4200	-	18000
Methyl tert butyl ether (MTBE)	94	31000	470	130000
Methylene chloride	960	6300	12000	26000
Naphthalene	0.72	31	3.6	130
Styrene	-	10000	-	44000
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trans-1,2-Dichloroethene	-	630	-	2600
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Vinyl chloride	1.6	1000	28	4400
Xylenes (total)	-	1000	-	4400

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000000TABLE 2.4

HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:
Sample ID:
Sample Date:

	RESIDENTIAL SVSL		***INDUSTRIAL SVSL***	
Parameter	***ELCR***	***HI***	***ELCR***	***HI***
	a	***b***	c	d
Volatiles				
1,1,1-Trichloroethane	-	52000	-	220000
1,1,2,2-Tetrachloroethane	0.42	-	2.1	-
1,1,2-Trichloroethane	1.5	2.1	7.7	8.8
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1,2-Dichloroethane	0.94	73	4.7	310
1,2-Dichloropropane	2.4	42	12	180
1,3-Dichlorobenzene[w]	2.2	8300	11	35000
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Acetone	-	320000	-	1400000
Benzene	3.1	310	16	1300
Bromodichloromethane	0.66	-	3.3	-
Bromoform	22	-	110	-
Bromomethane (Methyl bromide)	-	52	-	220
Carbon disulfide	-	7300	-	31000
Carbon tetrachloride	4.1	1000	20	4400
Chlorobenzene	-	520	-	2200
Chloroethane	-	100000	-	440000
Chloroform (Trichloromethane)	1.1	1000	5.3	4300
Chloromethane (Methyl chloride)	-	940	-	3900
cis-1,2-Dichloroethene[x]	-	630	-	2600
cis-1,3-Dichloropropene[y]	6.1	210	31	880
Cyclohexane	-	63000	-	260000
Dibromochloromethane	0.9	-	4.5	-
Dichlorodifluoromethane (CFC-12)	-	1000	-	4400
Ethylbenzene	9.7	10000	49	44000
Isopropyl benzene	-	4200	-	18000
Methyl tert butyl ether (MTBE)	94	31000	470	130000
Methylene chloride	960	6300	12000	26000
Naphthalene	0.72	31	3.6	130
Styrene	-	10000	-	44000
Tetrachloroethene	94	420	470	1800
Toluene	-	52000	-	220000
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Trichloroethene	4.3	21	30	88
Trichlorofluoromethane (CFC-11)	-	7300	-	31000
Trifluorotrichloroethane (Freon 113)	-	310000	-	1300000
Vinyl chloride	1.6	1000	28	4400
Xylenes (total)	-	1000	-	4400

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000000TABLE 2.4

HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

Sample Location:				
Sample ID:				
Sample Date:				
	RESIDENTIAL SVSL		***INDUSTRIAL SVSL***	
Parameter	***ELCR***	***HI***	***ELCR***	***HI***
	a	***b***	c	d
Volatiles				
1,1,1-Trichloroethane	-	52000	-	220000
1,1,2,2-Tetrachloroethane	0.42	-	2.1	-
1,1,2-Trichloroethane	1.5	2.1	7.7	8.8
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Benzene	3.1	310	16	1300
Bromodichloromethane	0.66	-	3.3	-
Bromoform	22	-	110	-
Bromomethane (Methyl bromide)	-	52	-	220
Carbon disulfide	-	7300	-	31000
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Dibromochloromethane	0.9	-	4.5	-
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Styrene	-	10000	-	44000
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Toluene	-	52000	-	220000
trans-1,2-Dichloroethene	-	630	-	2600
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000000TABLE 2.4

HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

[x] = An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
[y] = An RSL is not available for cis-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for cis-1,3-dichloropropene.
[z] = An RSL is not available for trans-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for trans-1,3-dichloropropene.

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HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

[x] = An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
[y] = An RSL is not available for cis-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for cis-1,3-dichloropropene.
[z] = An RSL is not available for trans-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for trans-1,3-dichloropropene.

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HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

[x] = An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
[y] = An RSL is not available for cis-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for cis-1,3-dichloropropene.
[z] = An RSL is not available for trans-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for trans-1,3-dichloropropene.

EPA-R5-2016-005983 Outlook0001167

HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

[x] = An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
[y] = An RSL is not available for cis-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for cis-1,3-dichloropropene.
[z] = An RSL is not available for trans-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for trans-1,3-dichloropropene.

000000TABLE 2.4

HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

[x] = An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
[y] = An RSL is not available for cis-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for cis-1,3-dichloropropene.
[z] = An RSL is not available for trans-1,3-dichloropropene; the RSL for 1,3-dichloropropene was considered an evaluation surrogate for trans-1,3-dichloropropene.

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HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

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000000TABLE 2.4

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OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

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OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

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OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

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OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

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HISTORIC SOIL VAPOR VOC ANALYTICAL RESULTS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL SITE
MORAINE, OHIO

000000TABLE 2.5

HISTORIC SOIL VAPOR FIELD PARAMETERS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Sample Location:	***GP06-09***	***GP06-09***	***GP06-09***	***GP06-09***	***GP06-09***	***GP07-09***	***GP07-09***	***GP07-09***	***GP07-09***	***GP07-09***	***GP08-09***	***GP08-09***	***GP08-09***	***GP08-09***	***GP08-09***
Sample ID:	***GP06-09***	***GP06-09***	***GP06-09***	***GP06-09***	***GP06-09***	***GP07-09***	***GP07-09***	***GP07-09***	***GP07-09***	***GP07-09***	***GP08-09***	***GP08-09***	***GP08-09***	***GP08-09***	***GP08-09***
Sample Date:	***9/18/2009***	***10/14/2009***	***12/9/2009***	***11/1/2012***	***1/10/2013***	***9/18/2009***	***10/14/2009***	***12/9/2009***	***11/1/2012***	***1/10/2013***	***9/18/2009***	***10/14/2009***	***12/9/2009***	***11/1/2012***	***1/10/2013***
Parameter															
Field Parameters															
Methane	0.1	0	0	0 / 0	0 / 0	0	0	0	0 / 0	0 / 0	0	0	0	0 / 0.1	0 / 0
Carbon Dioxide (%)	8.2	6.1	2.5	2.4 / 2.1	1.5 / 1.5	13.6	12.8	5.1	6.2 / 6.7	13.7 / 13.8	10.5	9.1	3.9	0 / 0.4	1.5 / 2.1
Oxygen (%)	--	10.1	16	19.1 / 19.5	19.3 / 19.0	--	4.4	13.9	13.1 / 12.8	4.7 / 5.0	--	7.8	16	21.9 / 21.6	21.2 / 20.6
Lower Explosive Limit (%)	--	0	0	0 / 0	0 / 0	--	0	0	0 / 0	0 / 0	--	0	0	0 / 2	0 / 0
Manometer Pressure (inches H_2O)	--	0	-1.1	0.8	0	--	0	0	2.81	2.41	--	0	0	0.8	-0.4
PID (ppm)	--	0	0	--	--	--	0	0	--	--	--	0	0	--	--
Barometric Pressure (in. Hg)	29.28	29.27	28.58	--	--	29.28	29.27	28.58	--	--	29.28	29.27	28.58	--	--
Balance (%)	--	83.8	81.5	78.5 / 78.4	79.2 / 79.5	--	82.9	81	80.7 / 80.5	81.6 / 81.2	--	83	80.1	78.1 / 77.9	77.3 / 77.3
Ambient Air Temperature (°F)	--	--	35	--	--	--	--	35	--	--	--	--	35	--	--

Notes:

Bold values exceed 10% of the LEL for methane
Bold and shaded values exceed the LEL for methane (5%)
Bold, shaded, and *italic* values exceed the UEL for methane (15%)
UEL - Upper explosive limit
LEL - Lower explosive limit
19.1 / 19.5 - filtered / unfiltered field reading
- - Not applicable.

000000TABLE 2.5

HISTORIC SOIL VAPOR FIELD PARAMETERS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Sample Location:	***GP09-09***	***GP09-09***	***GP09-09***	***GP09-09***	***GP09-09***	***GP10-09***	***GP10-09***	***GP10-09***	***GP10-09***	***GP10-09***
Sample ID:	***GP09-09***	***GP09-09***	***GP09-09***	***GP09-09***	***GP09-09***	***GP10-09***	***GP10-09***	***GP10-09***	***GP10-09***	***GP10-09***
Sample Date:	***9/18/2009***	***10/14/2009***	***12/9/2009***	***11/1/2012***	***1/7/2013***	***9/18/2009***	***10/14/2009***	***12/9/2009***	***11/1/2012***	***1/7/2013***
Parameter										
Field Parameters										
Methane	0.1	0	0	0 / 0	0 / 0	0	0.1	0	0 / 0	0 / 0
Carbon Dioxide (%)	9.2	8.1	4.4	4.2 / 4.5	4.9 / 4.4	4.4	3.5	2.4	4.0 / 4.3	4.1 / 4.5
Oxygen (%)	--	12.1	13.5	19.8 / 19.7	16.2 / 16.2	13.5	--	8.3	3.1 / 2.4	0.1 / 0.0
Lower Explosive Limit (%)	--	0	0	0 / 0	0 / 0	0	--	0	0 / 0	0 / 0
Manometer Pressure (inches H_2O)	--	0	-0.4	0	0	-0.4	--	-2	5.22	4.42
PID (ppm)	--	0	0	--	--	0	--	0	--	--
Barometric Pressure (in. Hg)	29.28	29	28.64	--	--	28.64	29.28	28.64	--	--
Balance (%)	--	79.8	82.1	76 / 75.8	78.9 / 79.4	82.1	--	89.3	92.9 / 93.3	95.8 / 95.5
Ambient Air Temperature (°F)	--	--	35	--	--	35	--	35	--	--

Notes:

Bold values exceed 10% of the LEL for methane
Bold and shaded values exceed the LEL for methane (5%)
Bold, shaded, and *italic* values exceed the UEL for methane (15%)
UEL - Upper explosive limit
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19.1 / 19.5 - filtered / unfiltered field reading
- - Not applicable.