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.

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

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

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

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

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

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

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

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

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

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

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

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

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

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

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

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

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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

HI - Hazard Index

SVSL = Soil Vapor Screening Level.

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

UJ - The parameter was not detected. The associate numerical values is the estimated sample quantitation limit.

The residential soil vapor screening levels (SVSLs) are based on the USEPA 2012 Regional Screening Levels (November 2012) for Residential Air. The RSLs are derived assuming a 10^{-6} target estimated lifetime cancer risk level or a hazard index of 1.

The SVSLs were derived from the USEPA (November 2012) RSLs by applying the USEPA Region 5 Vapor Intrusion Guidebook (Oct 2010) default soil-vapor-to-indoor-air attenuation factor of 0.1.

[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.

EPA-R5-2016-005983 Outlook0000762

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.

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.

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.

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.

EPA-R5-2016-005983 Outlook0000762

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 Outlook0000762

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 Outlook0000762

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.

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.

EPA-R5-2016-005983 Outlook0000762

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 Outlook0000762

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 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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

EPA-R5-2016-005983 Outlook0000762

000000TABLE 2.4

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
LEL - Lower explosive limit
19.1 / 19.5 - filtered / unfiltered field reading
- - Not applicable.