

APPENDIX N
ECOLOGICAL RISK ASSESSMENT TABLES

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**Table N-1. Bioaccumulation Factors and Log Octanol-Water Partition Coefficients (K_{ow} s)
for Analytes at Demolition Area 2**

Chemical	CAS Registry Number	Log K_{ow} ^a (L/kg)	Source	BAF MAX	Source
Aluminum		NA	NA	0.075	HAZWRAP (1994)
Ammonia		NA	NA	1	default value
Antimony		NA	NA	0.05	HAZWRAP (1994)
Arsenic		NA	NA	0.1	HAZWRAP (1994)
Barium		NA	NA	0.0075	HAZWRAP (1994)
Beryllium		NA	NA	0.05	HAZWRAP (1994)
Boron		NA	NA	1	default value
Cadmium		NA	NA	11	HAZWRAP (1994)
Calcium		NA	NA	1	default value
Chloride		NA	NA	1	default value
Chromium		NA	NA	0.28	HAZWRAP (1994)
Chromium, hexavalent		NA	NA	0.28	HAZWRAP (1994)
Cobalt		NA	NA	1	HAZWRAP (1994)
Copper		NA	NA	0.5	HAZWRAP (1994)
Cyanide		NA	NA	0	HAZWRAP (1994)
Fluoride		NA	NA	1	default value
Iron		NA	NA	1	default value
Lead		NA	NA	2	HAZWRAP (1994)
Magnesium		NA	NA	1	default value
Manganese		NA	NA	0.02	HAZWRAP (1994)
Mercury		NA	NA	13	HAZWRAP (1994)
Molybdenum		NA	NA	1	default value
Nickel		NA	NA	0.3	HAZWRAP (1994)
Nitrate		NA	NA	1	default value
Phosphorus		NA	NA	1	default value
Potassium		NA	NA	1	default value
Selenium		NA	NA	0.76	HAZWRAP (1994)
Silicon		NA	NA	1	default value
Silver		NA	NA	0.15	HAZWRAP (1994)
Sodium		NA	NA	1	default value
Sulfide		NA	NA	1	default value
Thallium		NA	NA	1	default value
Vanadium		NA	NA	0.13	HAZWRAP (1994)
Zinc		NA	NA	5	HAZWRAP (1994)
1,1,1-Trichloroethane	71-55-6	2.48	EPA 1995a in Jones, et al 1996	NA	NA
1,1,2,2-Tetrachloroethane	79-34-5	2.39	EPA 1995a in Jones, et al 1996	NA	NA
1,1,2,2-Tetrachloroethylene	127-18-4	2.67	EPA 1995e in Sample, et al 1996	NA	NA
1,1,2-Trichloroethane	79-00-5	2.17	EPA 1995	NA	NA
1,1'-Biphenyl	92-52-4	4.09	Schwarzenbach, et al 1993	NA	NA
1,1-Dichloroethane	75-34-3	4.00	EPA 1995a in Jones, et al 1996	NA	NA
1,1-Dichloroethene	75-35-4	2.13	EPA 1995a in Jones, et al 1996	NA	NA
1,1-Dichloroethylene	75-35-4	5.00	EPA 1995e in Sample, et al 1996	NA	NA
1,2,2-Trichloro-1,1,2-trifluoro	76-13-1	3.16	Hansch and Leo 1985 in Syracuse 1996	NA	NA
1,2,3,4-Tetrachlorobenzene	634-66-2	4.55	Swarzenbch, et al 1993	NA	NA
1,2,3-Trichlorobenzene	87-61-6	4.05	Sangster 1994 in Syracuse 1996	NA	NA
1,2,3-Trichloropropane	96-18-4	1.98	Russom, et al 1996	NA	NA
1,2,4,5-Tetrachlorobenzene	95-94-3	4.64	Hansch and Leo 1985 in Syracuse 1996	NA	NA
1,2,4-Trichlorobenzene	120-82-1	4.02	EPA 1995d	NA	NA
1,2,4-Trimethyl benzene	95-63-6	3.63	Hansch, et al 1995 in Syracuse 1996	NA	NA
1,2-Dibromo-3-Chloropropane	96-12-8	2.96	Chem Inspect Test Inst. 1992 in Syracuse 1996	NA	NA
Indeno(1,2,3- <i>cd</i>)pyrene	193-39-5	6.92	EPA (1994b)	NA	NA
1,2-Dichloro-1,1,2,2-tetrafluor	76-14-2	2.82	Hansch and Leo 1985 in Syracuse 1996	NA	NA

**Table N-1. Bioaccumulation Factors and Log Octanol-Water Partition Coefficients (K_{ow} s)
for Analytes at Demolition Area 2 (continued)**

Chemical	CAS Registry Number	Log K_{ow} ^a (L/kg)	Source	BAF MAX	Source
1,2-Dichlorobenzene	95-50-1	3.38	EPA 1995d	NA	NA
1,2-Dichloroethane	107-06-2	1.47	EPA 1995a in Jones, et al 1996	NA	NA
1,2-Dichloroethene	540-59-0	1.86	EPA 1995a in Jones, et al 1996	NA	NA
1,2-Dichloroethylene	540-59-0	1.86	EPA 1995e in Sample, et al 1996	NA	NA
1,2-Dimethylbenzene	95-47-6	3.12	Schwarzenbach, et al 1993	NA	NA
1,2-Diphenylhydrazine	122-66-7	2.94	Hansch and Leo 1985 in Syracuse 1996	NA	NA
1,3,5-Trinitrobenzene	99-35-4	1.18	Hansch and Leo 1985 in Syracuse 1996	NA	NA
1,3-Butadiene	106-99-0	1.99	Hansch and Leo 1985 in Syracuse 1996	NA	NA
1,3-Dichlorobenzene	541-73-1	3.43	EPA 1995a in Jones, et al 1996	NA	NA
1,3-Dichloropropene	542-75-6	2.00	EPA 1995a in Jones, et al 1996	NA	NA
1,3-Dinitrobenzene	99-65-0	1.49	Hansch and Leo 1985 in Syracuse 1996	NA	NA
1,4-Dichlorobenzene	95-50-1	3.42	EPA 1995a in Jones, et al 1996	NA	NA
1,4-Dinitrobenzene	100-25-4	1.46	Hansch and Leo 1985 in Syracuse 1996	NA	NA
1,4-Dioxane	123-91-1	-0.39	EPA 1995e in Sample, et al 1996	NA	NA
1,4-Naphthoquinone	130-15-4	1.71	Hansch, et al 1995 in Syracuse 1996	NA	NA
1-12'-Dimethylbenz(a)anthracene	57-97-6	5.80	Hansch and Leo 1985 in Syracuse 1996	NA	NA
1-Hexanol	111-27-3	2.03	Schwarzenbach, et al 1993	NA	NA
HMX	2691-41-0	--	No Source	NA	NA
1-Methylnaphthalene	90-12-0	3.87	Syracuse 1996 in Jones, et al 1996	NA	NA
1-Nitropropane	108-03-2	0.87	Hansch and Leo 1985 in Syracuse 1996	NA	NA
1-Octanol	111-87-5	2.84	Schwarzenbach, et al 1993	NA	NA
1-Pentanol	71-41-0	1.51	Syracuse 1996 in Jones, et al 1996	NA	NA
2,2'-oxybis(1-chloropropane)	108-60-1	2.48	Kawamoto, K and Urano, K 1989 in Syracuse 1996	NA	NA
2,3,4,5-Tetrachlorophenol	4901-51-3	4.21	Hansch and Leo 1985 in Syracuse 1996	NA	NA
2,3,4,6-Tetrachlorophenol	58-90-2	4.45	Russom, et al 1996 ⁱ	NA	NA
2,3,5,6-Tetrachloroaniline	3481-20-7	4.10	Russom, et al 1996	NA	NA
Nitrocellulose	9004-70-0	--	No Source	NA	NA
n-nitrosodiphenylamine	86-30-6	3.13	Hansch and Leo 1985 in Syracuse 1996	NA	NA
2,3,7,8-Tetrachloro-Dibenzodioxin	1746-01-6	6.53	EPA 1995e in Sample, et al 1996 ^f	NA	NA
Tetryl	479-45-8	--	No Source	NA	NA
2,4,5-Trichloroaniline	636-30-6	4.01	EPA 1995a in Jones, et al 1996	NA	NA
2,4,5-Trichlorophenoxyacetic acid	93-76-5	3.31	Hansch and Leo 1985 in Syracuse 1996	NA	NA
2,4,6-Trichlorophenol	88-06-2	3.69	Hansch and Leo 1985 in Syracuse 1996	NA	NA
2,4,6-Trinitrotoluene	118-96-7	1.60	Hansch and Leo 1985 in Syracuse 1996	NA	NA
2,4-D	94-75-7	2.81	EPA 1995c ^k	NA	NA
2,4-Dichloroaniline	554-00-7	2.78	Sangster 1994 in Syracuse 1996	NA	NA
2,4-Dichlorophenol	120-83-2	3.06	Russom, et al 1996	NA	NA
2,4-Dimethylphenol	105-67-9	2.35	Swarzenbch, et al 1993	NA	NA
2,4-Dinitrophenol	51-28-5	1.54	Howard 1990	NA	NA
2,4-Dinitrotoluene	121-14-2	1.98	Howard 1990	NA	NA
2,6-Dichlorophenol	87-65-0	2.75	Hansch, et al 1995 in Syracuse 1996	NA	NA
2,6-Dinitrotoluene	606-20-2	1.72	Howard 1990	NA	NA
2-Butanone	79-93-3	0.29	EPA 1995a in Jones et al 1996	NA	NA
2-Chloronaphthalene	91-58-7	3.98	Sangster 1994 in Syracuse 1996	NA	NA
2-Chlorophenol	95-57-8	2.15	Howard 1990.	NA	NA
2-Chloropropane	75-29-6	1.90	Hansch and Leo 1985 in Syracuse 1996	NA	NA
2-Chlorotoluene	95-49-8	3.42	Hansch and Leo 1985 in Syracuse 1996	NA	NA
2-Hexanone	591-78-6	1.38	EPA 1995a in Jones, et al 1996	NA	NA
2-Methylnaphthalene	91-57-6	-1.90	SCDM 1993 in HAZWRAP 1994	NA	NA
2-Methylnaphthalene	91-57-6	3.86	Hansch and Leo 1985 in Syracuse 1996	NA	NA
2-Methylphenol	95-48-7	1.99	EPA 1995a in Jones, et al 1996	NA	NA
2-Naphthylamine	91-59-8	2.28	Hansch and Leo 1985 in Syracuse 1996	NA	NA

**Table N-1. Bioaccumulation Factors and Log Octanol-Water Partition Coefficients (K_{ow} s)
for Analytes at Demolition Area 2 (continued)**

Chemical	CAS Registry Number	Log K_{ow} ^a (L/kg)	Source	BAF MAX	Source
2-Nitrophenol	88-75-5	1.79	Howard 1990	NA	NA
2-Octanone	111-13-7	2.37	Syracuse 1996 in Jones, et al 1996	NA	NA
2-Picoline	109-06-8	1.11	Russom, et al 1996	NA	NA
2-Propanol	67-63-0	0.05	Hansch and Leo 1985 in Syracuse 1996	NA	NA
2-Propenoic acid	79-10-7	0.35	Hansch, et al 1995 in Syracuse 1996	NA	NA
3,3'-Dichlorobenzidine	91-94-1	3.51	Howard 1990 ^l	NA	NA
3,3'-Dimethoxybenzidine	119-90-4	1.81	Debnath, et al 1992 in Syracuse 1996	NA	NA
3,3'-Dimethylbenzidine	119-93-7	2.34	Hansch and Leo 1985 in Syracuse 1996	NA	NA
3,4-Dichloroaniline	95-76-1	2.69	Russom, et al 1996	NA	NA
3,4-Dichlorophenol	95-77-2	3.33	Hansch and Leo 1985 in Syracuse 1996	NA	NA
3-Chloroaniline	108-42-9	1.88	Hansch and Leo 1985 in Syracuse 1996	NA	NA
3-Chlorophenol	108-43-0	2.50	Howard 1990.	NA	NA
3-Nitroaniline	99-09-2	1.37	Hansch and Leo 1985 in Syracuse 1996	NA	NA
3-Pentanone	96-22-0	0.99	Hansch and Leo 1985 in Syracuse 1996	NA	NA
4,4-Methylenedianiline	101-77-9	1.59	Hansch and Leo 1985 in Syracuse 1996	NA	NA
4,6-Dinitro-2-methylphenol	534-52-1	2.12	Hansch and Leo 1985 in Syracuse 1996	NA	NA
4-Bromoaniline	106-40-1	2.26	Hansch and Leo 1985 in Syracuse 1996	NA	NA
4-Bromophenyl phenyl-ether	101-55-3	5.00	EPA 1995a in Jones et al 1996	NA	NA
4-Chloro-3-methylphenol	35421-08-0	3.10	Russom, et al 1996	NA	NA
4-chloroaniline	106-47-8	1.83	Howard 1990	NA	NA
4-Chlorophenol	106-48-9	2.39	Howard 1990.	NA	NA
4-Chlorophenyl-phenyl ether	7005-72-3	4.08	Sangster 1994 in Syracuse 1996	NA	NA
4-Chlorotoluene	106-43-4	3.33	Hansch and Leo 1985 in Syracuse 1996	NA	NA
4-Methyl 2-Pentanone	108-10-1	1.31	Syracuse 1996 in Jones, et al 1996	NA	NA
4-Methylphenol	106-44-5	1.90	SCDM 1993 in HAZWRAP 1994	NA	NA
4-Nitroaniline	100-01-6	1.39	Hansch and Leo 1985 in Syracuse 1996	NA	NA
4-Nitrophenol	100-02-7	1.91	Howard 1990	NA	NA
4-Nitroquinoline-1-oxide	56-57-5	1.09	Hansch and Leo 1985 in Syracuse 1996	NA	NA
4-Toluidine	106-49-0	1.39	Russom, et al 1996	NA	NA
5-Nitro-o-Toluidine	99-55-8	1.87	Hansch, et al 1995 in Syracuse 1996	NA	NA
Acenaphthene	83-32-9	3.92	EPA 1995a in Jones, et al 1996	NA	NA
Acenaphthylene	208-96-8	4.10	SCDM 1993 in HAZWRAP 1994	NA	NA
Acetone	67-64-1	-0.24	EPA 1995a in Jones, et al 1996	NA	NA
Acetonitrile	75-05-8	0.25	Howard 1990	NA	NA
Acetonitrile	75-05-8	-0.34	Hansch and Leo 1995 in Syracuse 1996	NA	NA
Acrolein	107-02-8	-0.01	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Acrylamide	79-06-1	-0.67	Howard 1990	NA	NA
Aldicarb	116-06-3	1.13	EPA 1995c	NA	NA
Aldrin	309-00-2	6.50	EPA 1995e in Sample, et al 1996	NA	NA
alpha, alpha-Dimethylphenethylamine	122-09-8	1.90	Hansch and Leo 1985 in Syracuse 1996	NA	NA
alpha-BHC	319-84-6	3.80	SCDM 1993 in HAZWRAP 1994	NA	NA
2-Amino-4,6-dinitrotoluene	35572-78-2	1.94	(estimated, Talmage et al. 1999)	NA	NA
4-Amino-2,6-dinitrotoluene	19406-51-0	--	No Source	NA	NA
Aniline	62-53-3	0.90	Howard 1990	NA	NA
Anthracene	120-12-7	4.55	EPA 1995a in Jones, et al 1996	NA	NA
Aroclor 1016	1264-11-2	5.60	ATSDR 1989 in Jones, et al 1996	NA	NA
Aroclor 1221	11104-28-2	4.70	ATSDR 1989 in Jones, et al 1996	NA	NA
Aroclor 1232	11141-16-5	5.10	ATSDR 1989 in Jones, et al 1996	NA	NA
Aroclor 1242	53469-21-9	5.60	ATSDR 1989 in Jones, et al 1996	NA	NA
Aroclor 1248	12672-29-6	6.20	ATSDR 1989 in Jones, et al 1996	NA	NA
PCB-1248	12672-29-6	6.20	ATSDR 1989 in Jones, et al 1996	NA	NA
Aroclor 1254	27323-18-8	6.50	ATSDR 1989 in Jones, et al 1996	NA	NA
Aroclor 1260	11096-82-5	6.80	ATSDR 1989 in Jones, et al 1996	NA	NA

**Table N-1. Bioaccumulation Factors and Log Octanol-Water Partition Coefficients (K_{ow} s)
for Analytes at Demolition Area 2 (continued)**

Chemical	CAS Registry Number	Log K_{ow} ^a (L/kg)	Source	BAF MAX	Source
Atrazine	1912-24-9	2.75	EPA 1995c	NA	NA
Azobenzene	103-33-3	3.82	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Benzaldehyde	100-52-7	1.48	Schwarzenbach, et al 1993	NA	NA
Benzene	71-43-2	2.13	EPA 1995a in Jones et al 1996	NA	NA
Benzidine	92-87-5	1.66	EPA 1995a in Jones et al 1996	NA	NA
Benzo(a)anthracene	56-55-3	5.70	EPA 1995a in Jones et al 1996	NA	NA
Benzo(a)pyrene	50-32-8	6.11	EPA 1995a in Jones et al 1996	NA	NA
Benzo(b)fluoranthene	205-99-2	6.10	SCDM 1993 in HAZWRAP 1994	NA	NA
Benzo(e)pyrene	192-97-2	6.44	Devoogt, et al 1990 in Syracuse 1996	NA	NA
Benzo(g,h,i)perylene	191-24-2	6.60	SCDM 1993 in HAZWRAP 1994 ^e	NA	NA
Benzo(k)fluoranthene	207-08-9	6.10	SCDM 1993 in HAZWRAP 1994	NA	NA
Benzoic Acid	65-85-0	1.87	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Benzyl Alcohol	100-51-6	1.11	EPA 1995a in Jones et al 1996	NA	NA
Benzyl Chloride	100-44-7	2.30	Hansch and Leo 1985 in Syracuse 1996	NA	NA
beta-BHC	319-85-7	3.81	EPA 1995e in Sample, et al 1996	NA	NA
BHC-mixed isomers	--	5.89	EPA 1995e in Sample, et al 1996	NA	NA
Biphenyl	95-52-4	3.96	EPA 1995b in Jones et al 1996	NA	NA
bis(2-chloroethyl)ether	111-44-4	1.29	Howard 1990	NA	NA
Bis(2-ethylhexyl)phthalate	117-81-7	7.60	Syracuse 1996 in Jones, et al 1996 ^c	NA	NA
Bromobenzene	108-86-1	2.99	Schwarzenbach, et al 1993	NA	NA
Bromodichloromethane	75-27-4	1.41	Syracuse 1996 in Jones, et al 1996	NA	NA
Butane	106-97-8	2.89	Schwarzenbach, et al 1993	NA	NA
Butylbenzyl phthalate	85-68-7	4.84	EPA 1995a in Jones, et al 1996	NA	NA
Captan	133-06-2	2.35	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Carbaryl	65-25-2	2.36	Schwarzenbach, et al 1993	NA	NA
Carbazole	86-74-8	3.76	Hansch and Leo 1979 in HAZWRAP 1994	NA	NA
Carbofuran	1563-66-2	2.32	EPA 1995c	NA	NA
Carbon Disulfide	75-15-0	2.00	EPA1995a in Jones, et al 1996	NA	NA
Carbon Tetrachloride	56-23-5	2.73	EPA 1995a in Jones, et al 1996	NA	NA
Chloracetamide	79-07-2	-0.53	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Chlordane	57-74-9	6.32	EPA 1995a in Jones, et al 1996	NA	NA
Chlordecone	143-50-0	5.30	EPA 1995e in Sample, et al 1996	NA	NA
Chlorobenzene	108-90-7	2.86	EPA 1995a in Jones, et al 1996	NA	NA
Chlorobenzilate	510-15-6	4.74	Chem Inspect Test Inst. 1992 in Syracuse 1996	NA	NA
Chlorodifluoromethane	75-45-6	1.08	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Chloroethane	75-00-3	1.43	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Chloroform	67-66-3	1.92	EPA 1995e in Sample, et al 1996	NA	NA
Chloromethane	74-87-3	0.91	Schwarzenbach, et al 1993	NA	NA
Chloropropene	107-05-1	2.03	Howard 1990	NA	NA
Chrysene	218-01-9	5.70	SCDM 1993 in HAZWRAP 1994	NA	NA
Cis-1,3-Dichloropropene	10061-02-6	2.06	Tomlin 1994 in Syracuse 1996	NA	NA
Cumene	98-82-8	3.66	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Cyanogen	460-19-5	0.07	Hansch, et al 1995 in Syracuse 1996	NA	NA
Cyclohexanol	108-93-0	1.23	Schwarzenbach, et al 1993	NA	NA
Cyclohexanone	108-94-1	0.81	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Cyclopentane	287-92-3	3.00	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Dalapon	75-99-0	0.78	EPA 1995c	NA	NA
DDT	50-29-3	6.53	EPA 1995a in Jones, et al 1996	NA	NA
4,4'-DDT	50-29-3	6.53	EPA 1995a in Jones, et al 1996	NA	NA
Decane	124-18-5	5.01	EPA 1995a in Jones, et al 1996	NA	NA
delta-BHC	319-86-8	4.10	SCDM 1993 in HAZWRAP 1994	NA	NA

**Table N-1. Bioaccumulation Factors and Log Octanol-Water Partition Coefficients (K_{ow} s)
for Analytes at Demolition Area 2 (continued)**

Chemical	CAS Registry Number	Log K_{ow} ^a (L/kg)	Source	BAF MAX	Source
Diallate	2303-16-4	4.49	Ellington and Stancil 1988 in Syracuse 1996	NA	NA
Diazinon	333-41-5	3.70	EPA 1995a in Jones, et al 1996	NA	NA
Dibenzo(a,h)anthracene	53-70-3	6.50	SCDM 1993 in HAZWRAP 1994	NA	NA
Dibenzofuran	132-64-9	4.12	EPA 1995a in Jones, et al 1996	NA	NA
Dibromochloromethane	124-48-1	2.16	Sangster 1994 in Syracuse 1996	NA	NA
Dibromomethane	74-95-3	1.70	Martiska, A, Bekarek, V 1990 in Syracuse 1996	NA	NA
Dichlorodifluoromethane	74-71-8	2.53	Swarzenbch, et al 1993	NA	NA
Diieldrin	60-57-1	5.37	EPA 1995a in Jones, et al 1996	NA	NA
Dienochlor	2227-17-0	3.50	British Crop Protection Council 1987 in ARS 1999	NA	NA
Diethyl Sulfide	352-93-2	1.95	Schwarzenbach, et al 1993	NA	NA
Diethylphthalate	84-66-2	2.50	EPA 1995a in Jones, et al 1996	NA	NA
Diisobutylphthalate	84-69-5	4.11	Schwarzenbach, et al 1993	NA	NA
Dimethoate	60-51-5	0.78	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Dimethylphthalate	131-11-3	1.53	Schwarzenbach, et al 1993	NA	NA
Di-n-butylphthalate	84-74-2	4.61	EPA 1995a in Jones, et al 1996	NA	NA
Di-n-octylphthalate	117-84-0	8.10	Ellington and Floyd 1996 in Syracuse 1996	NA	NA
Dinoseb	88-85-7	3.56	Hansch, et al 1995 in Syracuse 1996	NA	NA
Dioxin	1746-01-6	6.80	EPA 1995d ^d	NA	NA
Diphenyl ether	101-84-8	4.21	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Diphenylamine	122-39-4	3.50	Russom, et al 1996	NA	NA
Diquat	85-00-7	-3.05	EPA 1995c	NA	NA
Disulfoton	298-04-4	4.02	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Diuron	330-54-1	2.80	Dupon Cortporation Data 1989 in ARS 1999	NA	NA
Endosulfan	115-29-7	4.10	EPA 1995a in Jones, et al 1996	NA	NA
Endosulfan Sulfate	1031-07-8	3.66	Hansch, et al 1995 in Syracuse 1996	NA	NA
Endosulfan, alpha	959-98-8	3.83	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Endrin	72-20-8	5.06	EPA 1995a in Jones, et al 1996	NA	NA
Endrin Aldehyde	7421-93-4	3.14	Arthur D. Little, Inc. 1981 in HAZWRAP 1994	NA	NA
Epichlorohydrin	106-89-8	0.45	Deneer, et al 1988 in Syracuse 1996	NA	NA
Ethane	74-84-0	1.81	Schwarzenbach, et al 1993	NA	NA
Ethanol	64-17-5	-0.31	EPA 1992b in Sample, et al 1996	NA	NA
Ethyl Acetate	141-78-6	0.69	EPA 1995e in Sample, et al 1996	NA	NA
Ethyl benzene	100-41-4	3.14	EPA 1995a in Jones, et al 1996	NA	NA
Ethyl carbamate	51-79-6	-0.15	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Ethyl ether	60-29-7	0.89	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Ethylene Dibromide	106-93-4	1.96	Hansch, et al 1995 in Syracuse 1996	NA	NA
Ethylene glycol	107-21-1	-1.36	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Famphur	52-85-7	2.23	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Fluometuron	2164-17-2	1.34	Schwarzenbch et al 1993	NA	NA
Fluoranthene	206-44-0	5.12	EPA 1995a in Jones, et al 1996	NA	NA
Fluorene	86-73-7	4.21	EPA 1995a in Jones, et al 1996	NA	NA
Fluorobenzene	462-06-6	2.27	Swarzenbch et al 1993	NA	NA
Formaldehyde	50-00-0	-0.05	EPA 1995e in Sample, et al 1996	NA	NA
Formamide	75-12-7	-1.51	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Formic Acid	64-18-6	-0.54	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Furan	110-00-9	1.34	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Furfural	98-01-1	0.41	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Heptachlor	76-44-8	6.10	EPA 1995a in Jones, et al 1996	NA	NA

**Table N-1. Bioaccumulation Factors and Log Octanol-Water Partition Coefficients (K_{ow} s)
for Analytes at Demolition Area 2 (continued)**

Chemical	CAS Registry Number	Log K_{ow} ^a (L/kg)	Source	BAF MAX	Source
Heptachlor Epoxide	102-57-3	5.40	SCDM 1993 in HAZWRAP 1994	NA	NA
Heptane	142-82-5	4.66	Miller, M.M., et al 1985 in Syracuse 1996	NA	NA
Hexachlorobenzene	118-74-1	5.50	Schwarzenbach, et al 1993	NA	NA
Hexachlorobutadiene	87-68-3	4.90	Schwarzenbach, et al 1993	NA	NA
Hexachlorocyclopentadiene	77-47-4	5.04	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Hexachloroethane	67-72-1	4.00	EPA 1995a in Jones, et al 1996	NA	NA
Hexachlorophene	70-30-4	7.54	Hansch, et al 1995 in Syracuse 1996	NA	NA
Imazaquin-ammonium	81335-47-9	0.34	Pesticide Manual, 1994 in ARS 1999	NA	NA
Imazilil	35554-44-0	3.82	British Crop Protection Council 1986 in ARS 1999	NA	NA
Isobutyl Alcohol	78-83-1	0.76	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Isophorone	78-59-1	1.70	Veith, G.D., et al 1980 in Syracuse 1996	NA	NA
Lindane (gamma-BHC)	58-89-9	3.73	EPA 1995a in Jones, et al 1996	NA	NA
Malathion	121-75-5	2.89	Schwarzenbach, et al 1993	NA	NA
MCPA	94-74-6	2.80	Pionke, H.B., Deangelis, R.J. 1980 in ARS 1999	NA	NA
m-cresol	108-39-4	1.96	Howard 1990.	NA	NA
Methacrylonitril	126-98-7	0.68	Tanii and Hashimoto 1994 in Syracuse 1996	NA	NA
Methanol	67-56-1	-0.71	EPA 1995e in Sample, et al 1996	NA	NA
Methapyrilene	91-80-5	2.87	Sangster 1994 in Syracuse 1996	NA	NA
Methomyl	16752-77-5	0.57	Dupont Corporation Data 1989 In ARS 1999	NA	NA
Methoxychlor	72-43-5	5.08	EPA 1995a in Jones, et al 1996	NA	NA
Methyl bromide	74-83-9	1.19	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Methyl iodide	74-88-4	3.36	EPA 1995a in Jones, et al 1996	NA	NA
Methyl methacrylate	80-62-6	1.38	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Methylcyclohexane	108-87-2	3.61	Hansch, et al 1995 in Syracuse 1996	NA	NA
Methylene Chloride	75-09-2	1.25	EPA 1995a in Jones, et al 1996	NA	NA
Methylhydrazine	60-34-4	-1.06	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Methylstyrene	98-83-9	3.48	Hansch, et al 1995 in Syracuse 1996	NA	NA
Mirex	2385-85-5	6.89	Veith, et al 1979 in Syracuse 1996	NA	NA
M-nitrosodiphenylamine	86-30-6	3.13	Hansch and Leo 1985 in Syracuse 1996	NA	NA
m-Nitrotoluene	99-08-1	2.45	Russom, et al 1996	NA	NA
Naphthalene	91-20-3	3.36	EPA 1995a in Jones, et al 1996	NA	NA
n-Butyl benzene	104-51-8	4.38	DeBruijn, J, et al 1989 in Syracuse 1996	NA	NA
n-Hexane	110-54-3	4.11	Schwarzenbach, et al 1993	NA	NA
Nitrobenzene	98-95-3	1.83	Schwarzenbch et al 1993	NA	NA
Nitroglycerin	55-63-0	1.62	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Nitromethane	75-52-5	-0.35	Hansch and Leo 1985 in Syracuse 1996	NA	NA
n-Nitrochlorobenzene	100-00-5	2.39	Hansch and Leo 1985 in Syracuse 1996	NA	NA
N-Nitrosodiethylamine	55-18-5	0.48	Hansch and Leo 1985 in Syracuse 1996	NA	NA
N-Nitrosomorpholine	59-89-2	-0.44	Hansch and Leo 1985 in Syracuse 1996	NA	NA
N-Nitrosopiperidine	100-75-4	0.36	Hansch and Leo 1985 in Syracuse 1996	NA	NA
N-Nitrosopyrrolidine	930-55-2	-0.19	Hansch and Leo 1985 in Syracuse 1996	NA	NA
n-Pentane	109-66-0	3.62	Swarzenbch, et al 1993	NA	NA
n-Pentylbenzene	538-68-1	4.90	Schwarzenbach, et al 1993	NA	NA
n-propyl benzene	103-65-1	3.69	Sangster 1994 in Syracuse 1996	NA	NA
o-Cresol	95-48-7	1.99	EPA 1995e in Sample, et al 1996	NA	NA
Octachloronaphthalene	2234-13-1	8.24	Opperhuizen, A 1985 in Syracuse 1996 ^b	NA	NA
o-Dichlorobenzene	95-50-1	3.38	EPA 1995d	NA	NA
o-Dinitrobenzene	528-29-0	1.69	Hansch, et al 1995 in Syracuse 1996	NA	NA
o-Nitroaniline	88-74-4	1.85	Hansch and Leo 1985 in Syracuse 1996	NA	NA

**Table N-1. Bioaccumulation Factors and Log Octanol-Water Partition Coefficients (K_{ow} s)
for Analytes at Demolition Area 2 (continued)**

Chemical	CAS Registry Number	Log K_{ow} ^a (L/kg)	Source	BAF MAX	Source
o-Nitrophenol	88-75-5	1.79	Howard 1990	NA	NA
o-Nitrotoluene	88-72-2	2.30	Opperhuizen, A 1985 in Syracuse 1996	NA	NA
Oxadiazon	19666-30-9	4.70	Rhone-Poulenc Corporation Data in ARS 1999	NA	NA
p,p'-DDD	72-54-8	6.10	EPA 1995a in Jones, et al 1996	NA	NA
4,4'-DDD	72-54-8	6.10	EPA 1995a in Jones, et al 1996	NA	NA
4,4'-DDE	72-55-9	6.26	EPA 1994b	NA	NA
Parathion	56-38-2	3.81	Schwarzenbach, et al 1993	NA	NA
p-Cresol	106-44-5	1.94	Hansch and Leo 1985 in Syracuse 1996	NA	NA
p-Dichlorobenzene	106-46-7	3.37	EPA 1995d	NA	NA
Pentachloroaniline	527-20-8	4.82	Sangster 1994 in Syracuse 1996	NA	NA
Pentachlorobenzene	608-93-5	5.26	EPA1995a in Jones, et al 1996	NA	NA
Pentachloroethane	76-01-7	3.63	Russom, et al 1996	NA	NA
Pentachloro-nitrobenzene	82-68-8	4.64	EPA 1995e in Sample, et al 1996	NA	NA
Pentachlorophenol	87-86-5	5.09	EPA 1995e in Sample, et al 1996	NA	NA
Phenacetin	62-44-2	1.58	Nakagawa, Y, et al 1992 in Syracuse 1996	NA	NA
Phenanthrene	85-01-8	4.55	EPA1995a in Jones, et al 1996	NA	NA
Phenmediphan	13684-63-4	3.59	Noram Company Data in ARS 1999	NA	NA
Phenol	108-95-2	1.48	EPA1995a in Jones, et al 1996	NA	NA
Phorate	298-02-2	3.56	Hansch, et al 1995 in Syracuse 1996	NA	NA
Phosmet	732-11-6	3.00	Beguhn, M.A. 1989 in ARS 1989	NA	NA
Phthalic acid	100-21-0	2.00	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Phthalic anhydride	85-44-9	1.60	Panoma 1987 in Syracuse 1996	NA	NA
p-Nitrophenol	100-02-07	1.91	Howard 1990	NA	NA
p-Nitrotoluene	99-99-0	2.37	Howard 1990	NA	NA
p-Phenylenediamine	106-50-3	-0.30	Hansch, et al 1995 in Syracuse 1996	NA	NA
Profenofos	41198-08-7	1.70	Ciba-Geigy Corporation Data 1989 in ARS 1999	NA	NA
Pronamide	23950-58-5	0.05	EPA1995a in Jones, et al 1996	NA	NA
Propionitril	107-12-0	0.16	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Pryidine	110-86-1	0.65	Russom, et al 1996	NA	NA
Pyrene	129-00-0	5.13	Schwarzenbach, et al 1993g	NA	NA
Quinoline	91-22-5	2.03	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Quinone	106-51-4	0.20	Hansch and Leo 1985 in Syracuse 1996	NA	NA
RDX	121-82-4	0.87	Schwarzenbach, et al 1993	NA	NA
sec-Butyl benzene	135-98-8	4.57	Sherblom, et al 1988 in Syracuse 1996	NA	NA
Silvex	93-72-1	3.80	Hansch, et al 1995 in Syracuse 1996	NA	NA
Simazine	122-34-9	2.18	EPA 1995c	NA	NA
Strychnine	57-24-9	1.93	Panoma 1987 in Syracuse 1996	NA	NA
Styrene	100-42-5	2.95	Schwarzenbach, et al 1993	NA	NA
Tebuthiuron	34014-18-1	1.79	ARS 1999	NA	NA
Temephos	3383-96-8	4.90	British Crop Protection Council 1994 in ARS 1999 ^h	NA	NA
tert-Butyl benzene	98-06-6	4.11	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Tetrachloroethane	25322-20-7	2.39	Schwarzenbach, et al 1993	NA	NA
Tetrachloroethene	127-18-4	2.88	Schwarzenbach, et al 1993	NA	NA
Tetrachloroethylene	127-18-4	3.40	EPA 1995d	NA	NA
Tetrachloromethane	56-23-5	2.73	EPA 1995a in Jones, et al 1996	NA	NA
Tetrahydrofuran	109-99-9	0.46	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Toluene	108-883	2.75	EPA 1995a in Jones, et al 1996	NA	NA
Toxaphene	8001-35-2	5.50	EPA 1995e in Sample, et al 1996	NA	NA
trans-1,3-Dichloropropene	10061-02-6	2.03	Tomlin 1994 in Syracuse 1996	NA	NA
Tribromomethane	75-25-2	2.35	EPA 1995a in Jones, et al 1996	NA	NA

**Table N-1. Bioaccumulation Factors and Log Octanol-Water Partition Coefficients (K_{ow} s)
for Analytes at Demolition Area 2 (continued)**

Chemical	CAS Registry Number	Log K_{ow} ^a (L/kg)	Source	BAF MAX	Source
Tributyl phosphate	126-73-8	4.00	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Trichloroethene	636-30-6	2.71	EPA 1995a in Jones, et al 1996	NA	NA
Trichloroethylene	79-01-6	2.71	EPA 1995e in Sample, et al 1996	NA	NA
Trichlorofluoromethane	75-69-4	2.16	Schwarzenbach, et al 1993	NA	NA
Triethylamine	121-44-8	1.45	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Trifluorobromomethane	75-63-8	1.86	Hansch and Leo 1985 in Syracuse 1996	NA	NA
Vinyl acetate	108-05-4	0.73	EPA 1995a in Jones, et al 1996	NA	NA
Vinyl Chloride	75-01-4	1.50	EPA 1995e in Sample, et al 1996	NA	NA
Xylene	1330-20-7	3.13	EPA 1995a in Jones, et al 1996	NA	NA
Xylene (mixed isomers)	1330-20-7	3.20	EPA 1995e in Sample, et al 1996	NA	NA
Ziram	137-30-4	1.09	British Crop Protection Council 1994 in ARS 1999	NA	NA

^aLog Octanol-Water partition coefficient.

^bSyracuse 1996. Syracuse Research Corporation, Environmental Sciences Center's on-line experimental Log P database conducted June 7, 1996.

^cJones, D.S., R N. Hull, G.W. Suter II. 1996. *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1996 Revision*, Lockheed Martin Energy Systems, Inc. Oak Ridge, TN 37831.

^dEPA. 1995d. National Primary Drinking Water Regulations; Contaminated Specific Fact Sheets. Volatile Organic Chemicals, Technical Version. USEPA Office of Water. EPA 811-F-95-004-T.

^eHAZWRAP (Hazardous Waste Remedial Action Program). 1994. Loring Air Force Base. Ecological Risk Assessment Methodology.

^fSample, B.E., D.M. Opresko, G.W. Suter II. 1996. *Toxicological Benchmarks for Wildlife*. Lockheed Martin Energy Systems, Inc. Oak Ridge, Tn. 37381.

^gSchwarzenbach, R.E., P.M. Gschwend, D.M. Imboden. 1993. Environmental Organic Chemistry. John Wiley & Sons, New York.

^hUnited States Department of Agriculture, Agricultural Research Service (ARS) 1999. Remote Sensing and Modeling Lab. 10300 Baltimore Ave. Bldg. 007. Beltsville, MD. 20705.

ⁱRusson, C.L., S. Bradbury, S. Broderius. 1996. Environmental Toxicology and Chemistry. V. 16. No. 5, pp.948-967. *Predicting Modes of Toxic Action from chemical Structure: Acute Toxicity in the Fathead Minnow (*pimephales Promelas*)*.

^jHoward, Philip, H. 1990. *Handbook of Environmental Fate and Exposure Data for Organic Chemicals VI*. Lewis Publishers, Chelsea, Michigan.

^kEPA. 1995c. National Primary Drinking Water Regulations; Contaminant Specific Fact Sheets. USEPA Office of Water. EPA 811-F-95-004-T.

U.S. EPA 1994b. Draft Report-Chemical Properties for Soil Screening Levels. Prepared for the OERR. Washington, D.C. July 26.

BAF Max = Bioaccumulation factor maximum (if BAF Max is > 1, the inorganic chemical is likely to bioaccumulate).

BHC = Benzene hexachloride.

CAS = Chemical Abstracts Service.

DDD = Dichlorodiphenyldichloroethane.

DDE = Dichlorodiphenyldichloroethylene.

DDT = Dichlorodiphenyltrichloroethane.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

NA = Not applicable.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

-- = no log K_{ow} found.

Table N-2. Media Evaluations for Frequency of Detection, Background Comparison, and PBT Identification for Surface Soil at Demolition Area 2

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log K _{ow}	Is the COI a PBT ^a ?	Site Background (mg/kg)	Is Maximum Detect > Background ^b ?	COPEC ^c ?	Justification
<i>Inorganics</i>										
Aluminum	7429-90-5	63/ 63	100	2.34E+04	--	no	1.77E+04	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Antimony	7440-36-0	3/ 63	5	2.20E+00	--	no	9.60E-01	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT compound
Arsenic	7440-38-2	63/ 63	100	1.99E+01	--	no	1.54E+01	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Barium	7440-39-3	63/ 63	100	1.75E+02	--	no	8.84E+01	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Beryllium	7440-41-7	63/ 63	100	1.50E+00	--	no	8.80E-01	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Cadmium	7440-43-9	61/ 63	97	9.50E+00	--	yes	no data	yes	yes	COPEC per PBT, freq of detect > 5%, no background
Calcium	7440-70-2	63/ 63	100	3.41E+04	--	no	1.58E+04	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Chromium	7440-47-3	63/ 63	100	6.08E+01	--	no	1.74E+01	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Chromium, hexavalent	18540-29-9	2/ 6	33	2.80E+01	--	no	no data	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Cobalt	7440-48-4	63/ 63	100	2.46E+01	--	no	1.04E+01	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Copper	7440-50-8	63/ 63	100	1.21E+03	--	no	1.77E+01	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Iron	7439-89-6	63/ 63	100	3.93E+04	--	no	2.31E+04	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Lead	7439-92-1	63/ 63	100	2.18E+02	--	yes	2.61E+01	yes	yes	COPEC per PBT, freq of detect > 5%, and maximum detect > background
Magnesium	7439-95-4	63/ 63	100	5.34E+03	--	no	3.03E+03	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Manganese	7439-96-5	63/ 63	100	2.14E+03	--	no	1.45E+03	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Mercury	7487-94-6	51/ 63	81	9.90E+00	--	yes	3.60E-02	yes	yes	COPEC per PBT, freq of detect > 5%, and maximum detect > background

Table N-2. Media Evaluations for Frequency of Detection, Background Comparison, and PBT Identification for Surface Soil at Demolition Area 2 (continued)

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log Kow	Is the COI a PBT ^a ?	Site Background (mg/kg)	Is Maximum Detect > Background ^b ?	COPEC ^c ?	Justification
Nickel	7440-02-0	63/ 63	100	3.12E+01	--	no	2.11E+01	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Nitrate/Nitrite		2/ 6	33	5.10E+00	--	no	no data	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Potassium	7440-09-7	63/ 63	100	2.51E+03	--	no	9.27E+02	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Selenium	7782-49-2	6/ 63	9	1.90E+00	--	no	1.40E+00	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Silver	7440-22-4	1/ 63	2	3.20E-01	--	no	no data	yes	no	Not COPEC per freq of detect < 5% and not being a PBT
Sodium	7440-23-5	6/ 63	9	2.23E+02	--	no	1.23E+02	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Sulfide	18496-25-8	6/ 6	100	2.20E+03	--	no	no data	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Vanadium	7440-62-2	63/ 63	100	3.80E+01	--	no	3.11E+01	yes	yes	COPEC per freq of detect > 5%, maximum detect > background
Zinc	7440-66-6	63/ 63	100	5.57E+02	--	yes	6.18E+01	yes	yes	COPEC per PBT, freq of detect > 5%, maximum detect > background
Organics-Explosives										
2-Amino-4,6-Dinitrotoluene	35572-78-2	3/ 63	5	3.90E-01	1.94E+00	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT compound
4-Amino-2,6-Dinitrotoluene	19406-51-0	4/ 63	5	2.50E-01	No Kow	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT compound
2,4-Dinitrotoluene	121-14-2	2/ 63	3	3.20E+00	1.98E+00	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT compound
HMX	2691-41-0	2/ 63	3	5.80E-01	No Kow	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT compound
Nitroglycerin	55-63-0	2/ 63	3	3.10E+01	1.62E+00	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT compound
RDX	121-82-4	1/ 63	2	1.50E-01	8.70E-01	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT compound
Tetryl	479-45-8	16/ 63	25	1.80E+01	No Kow	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
1,3,5-Trinitrobenzene	99-35-4	1/ 63	2	8.60E-02	1.18E+00	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT compound

**Table N-2 Media Evaluations for Frequency of Detection, Background Comparison, and PBT Identification for Surface Soil at Demolition Area 2
(continued)**

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log Kow	Is the COI a PBT ^a ?	Site Background (mg/kg)	Is Maximum Detect > Background ^b ?	COPEC ^c ?	Justification
2,4,6-Trinitrotoluene	121-14-2	6/ 63	9	3.20E+00	1.60E+00	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
<i>Organics-Pesticides/PCBs</i>										
4,4'-DDD	72-54-8	1/ 6	17	2.60E-02	6.10E+00	yes	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
<i>Organics-Semivolatiles</i>										
Bis(2-ethylhexyl)phthalate	117-81-7	2/ 6	33	1.00E-01	7.60E+00	yes	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
Di-n-butylphthalate	84-74-2	2/ 6	33	8.60E-01	4.61E+00	yes	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
n-Nitrosodiphenylamine	86-30-6	1/ 6	17	1.00E-01	3.13E+00	yes	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
<i>Organics-Volatiles</i>										
Acetone	67-64-1	1/ 6	17	1.90E-02	-2.40E-01	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
2-Butanone	78-93-3	1/ 6	17	8.90E-03	2.90E-01	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
Tetrachloroethene	127-48-4	3/ 6	50	4.80E-03	2.88E+00	no	no data	yes	yes	COPEC per freq of detect > 5% and no background

^a"yes" = COI meets the criterion for being a PBT compound; else "no."

^b"yes" = maximum detect is > than the background value; else "no."

^c"yes" = COI frequency of detection is > 5% and maximum detect exceeds the background value and/or the COI is a PBT; else "no."

CAS = Chemical Abstract Service.

COI = Chemical of interest.

COPEC = Constituent of potential ecological concern.

DDD = Dichlorodiphenyldichloroethane.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

Log K_{ow} = Log of octanol-water partition coefficient (Kow).

PBT = persistent, bioaccumulative, and toxic compound (inorganics include cadmium, lead, mercury, and zinc; organics include Log K_{ow} of at least 3.0).

PCB = Polychlorinated biphenyl.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

-- = Not applicable, K_{ow} applies only to organic compounds.

Table N-3. Data and Media Evaluations for Frequency of Detection, Background Comparison, and PBT Identification for Subsurface Soil at Demolition Area 2

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log K _{ow}	Is the COI a PBT ^a ?	Site Background (mg/kg)	Is Maximum Detect > Background ^b ?	COPEC ^c ?	Justification
<i>Inorganics</i>										
Aluminum	7429-90-5	62/ 62	100	1.89E+04	--	no	1.95E+04	no	no	Not a COPEC per maximum detect < background and not a PBT
Antimony	7440-36-0	1/ 62	2	2.20E+00	--	no	9.60E-01	yes	no	Not a COPEC per freq of detect ≤ 5% and not a PBT
Arsenic	7440-38-2	62/ 62	100	3.26E+01	--	no	1.98E+01	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Barium	7440-39-3	62/ 62	100	7.00E+02	--	no	1.24E+02	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Beryllium	7440-41-7	62/ 62	100	8.70E-01	--	no	8.80E-01	no	no	Not a COPEC per maximum detect < background and not a PBT
Cadmium	7440-43-9	60/ 62	97	4.70E+00	--	yes	no data	yes	yes	COPEC per PBT, freq of detect > 5%, no background data
Calcium	7440-70-2	62/ 62	100	1.93E+04	--	no	3.55E+04	no	no	Not a COPEC per maximum detect < background and not a PBT
Chromium	7440-47-3	62/ 62	100	2.46E+01	--	no	2.72E+01	no	no	Not a COPEC per maximum detect < background and not a PBT
Chromium, hexavalent	18540-29-9	1/ 6	17	1.60E+01	--	no	no data	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Cobalt	7440-48-4	62/ 62	100	1.51E+01	--	no	2.32E+01	no	no	Not a COPEC per maximum detect < background and not a PBT
Copper	7440-50-8	62/ 62	100	4.45E+02	--	no	3.23E+01	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Iron	7439-89-6	62/ 62	100	4.58E+04	--	no	3.52E+04	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Lead	7439-92-1	62/ 62	100	1.47E+02	--	yes	1.91E+01	yes	yes	COPEC per PBT, freq of detect > 5%, and maximum detect > background
Magnesium	7439-95-4	62/ 62	100	1.10E+04	--	no	8.79E+03	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Manganese	7439-96-5	62/ 62	100	2.62E+03	--	no	3.03E+03	no	no	Not a COPEC per maximum detect < background and not a PBT
Mercury	7487-94-6	28/ 63	45	1.81E+01	--	yes	4.40E-02	yes	yes	COPEC per PBT, freq of detect > 5%, and maximum detect > background

Table N-3. Data and Media Evaluations for Frequency of Detection, Background Comparison, and PBT Identification for Subsurface Soil at Demolition Area 2 (continued)

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log Kow	Is the COI a PBT ^a ?	Site Background (mg/kg)	Is Maximum Detect > Background ^b ?	COPEC ^c ?	Justification
Nickel	7440-02-0	62/ 62	100	5.64E+01	--	no	6.07E+01	no	no	Not a COPEC per maximum detect < background and not a PBT
Nitrate/Nitrite		2/ 6	33	3.70E+00	--	no	no data	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Potassium	7440-09-7	62/ 62	100	1.99E+03	--	no	3.35E+03	no	no	Not a COPEC per maximum detect < background and not a PBT
Selenium	7782-49-2	6/ 62	10	1.70E+00	--	no	1.50E+00	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Sodium	7440-23-5	2/ 62	3	1.59E+02	--	no	1.45E+02	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT
Sulfide	18496-25-8	6/ 6	100	1.90E+03	--	no	no data	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Vanadium	7440-62-2	62/ 62	100	2.96E+01	--	no	3.76E+01	no	no	Not a COPEC per maximum detect < background and not a PBT
Zinc	7440-66-6	62/ 62	100	2.77E+03	--	yes	9.33E+01	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
<i>Organics-Explosives</i>										
2-Amino-4,6-Dinitrotoluene	35572-78-2	4/ 62	6	5.70E-01	1.94E+00	no	no data	yes	yes	COPEC per freq of detect > 5% and no background data
4-Amino-2,6-Dinitrotoluene	19406-51-0	5/ 62	8	4.30E-01	No Kow	no	no data	yes	yes	COPEC per freq of detect > 5% and no background data
2,4-Dinitrotoluene	121-14-2	3/ 62	5	6.20E-02	1.98E+00	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT
HMX	2691-41-0	2/ 62	3	4.60E-01	No Kow	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT
Nitroglycerine	55-63-0	1/ 62	2	2.60E+01	No Kow	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT
o-Nitrotoluene	88-72-2	1/ 62	2	4.30E-01	No Kow	no	no data	yes	no	Not a COPEC per freq of detect <= 5% and not a PBT
RDX	121-82-4	3/ 62	5	5.20E-01	8.70E-01	no	no data	yes	yes	Not a COPEC per freq of detect <= 5% and not a PBT
Tetryl	479-45-8	8/ 62	13	2.20E+01	No Kow	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
2,4,6-Trinitrotoluene	121-14-2	9/ 62	14	1.30E+00	1.60E+00	no	no data	yes	yes	COPEC per freq of detect > 5% and no background

Table N-3. Data and Media Evaluations for Frequency of Detection, Background Comparison, and PBT Identification for Subsurface Soil at Demolition Area 2 (continued)

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log Kow	Is the COI a PBT ^a ?	Site Background (mg/kg)	Is Maximum Detect > Background ^b ?	COPEC ^c ?	Justification
<i>Organics-Semivolatiles</i>										
Bis(2-ethylhexyl)phthalate	117-81-7	4/ 6	67	1.30E-01	7.60E+00	yes	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
Di-n-butylphthalate	84-74-2	3/ 6	50	3.40E-01	4.61E+00	yes	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
<i>Organics-Volatiles</i>										
2-Butanone	78-93-3	1/ 6	17	1.20E-02	2.90E-01	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
Tetrachloroethene	127-48-4	1/ 6	17	2.40E-03	2.88E+00	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
Toluene	108-88-3	1/ 6	17	7.00E-03	2.75E+00	no	3.40E-03	yes	yes	COPEC per freq of detect > 5% and maximum detect > background

^a"yes" = COI meets the criterion for being a PBT compound; else "no."

^b"yes" = Maximum detect is > than the background value; else "no."

^c"yes" = COI frequency of detection is > 5% and maximum detect exceeds the background value and/or the COI is a PBT; else "no."

CAS = Chemical Abstract Service.

COI = Chemical of interest.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

Log K_{ow} = Log of octanol-water partition coefficient (K_{ow}).

PBT = Persistent, bioaccumulative, and toxic compound (inorganics include cadmium, lead, mercury, and zinc; organics include Log K_{ow} of at least 3.0).

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

-- = Not applicable, K_{ow} applies only to organic compounds.

Table N-4. Data and Media Evaluations for Frequency of Detection, Sediment Reference Values and Background Comparison, and PBT Identification for Downstream Sediment at Sand Creek, Demolition Area 2

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log K _{ow}	Is the COI a PBT ^a ?	EOLP SRV (mg/kg)	Is Maximum Detect > SRV ^b ?	Site Background (mg/kg)	Is Maximum Detect > Background ^c ?	COPEC ^d ?	Justification
<i>Inorganics</i>												
Aluminum	7429-90-5	6/ 6	100	6.76E+03	--	no	2.90E+04	no	1.39E+04	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Arsenic	7440-38-2	6/ 6	100	1.14E+01	--	no	2.50E+01	no	1.95E+01	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Barium	7440-39-3	6/ 6	100	4.33E+01	--	no	1.90E+02	no	1.23E+02	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Beryllium	7440-41-7	6/ 6	100	5.70E-01	--	no	8.00E-01	no	3.80E-01	yes	no	Not a COPEC per maximum detect < SRV and not a PBT
Cadmium	7440-43-9	6/ 6	100	1.10E+00	--	yes	7.90E-01	yes	no data	yes	yes	COPEC per PBT, freq of detect > 5%, maximum detect > SRV
Calcium	7440-70-2	6/ 6	100	5.35E+03	--	no	2.10E+04	no	5.51E+03	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Chromium	7440-47-3	6/ 6	100	1.17E+01	--	no	2.90E+01	no	1.81E+01	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Chromium, hexavalent	18540-29-9	1/ 4	25	6.10E+00	--	no	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect > 5% and no SRV or background
Cobalt	7440-48-4	6/ 6	100	8.70E+00	--	no	1.20E+01	no	9.10E+00	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Copper	7440-50-8	6/ 6	100	5.27E+01	--	no	3.20E+01	yes	2.76E+01	yes	yes	COPEC per PBT, freq of detect > 5%, also max is > SRV
Iron	7439-89-6	6/ 6	100	2.41E+04	--	no	4.10E+04	no	2.82E+04	no	no	Not a COPEC per maximum detect < SRV and not a PBT

Table N-4. Data and Media Evaluations for Frequency of Detection, Sediment Reference Values and Background Comparison, and PBT Identification for Downstream Sediment at Sand Creek, Demolition Area 2 (continued)

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log Kow	Is the COI a PBT ^a ?	EOLP SRV (mg/kg)	Is Maximum Detect > SRV ^b ?	Site Background (mg/kg)	Is Maximum Detect > Background ^c ?	COPEC ^d ?	Justification
Lead	7439-92-1	6/ 6	100	3.08E+01	--	yes	4.70E+01	no	2.74E+01	yes	yes	COPEC per PBT and freq of detect >5%
Magnesium	7439-95-4	6/ 6	100	2.53E+03	--	no	7.10E+03	no	2.76E+03	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Manganese	7439-96-5	6/ 6	100	4.57E+02	--	no	1.50E+03	no	1.95E+03	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Mercury	7487-94-6	4/ 6	67	3.70E-01	--	yes	1.20E-01	yes	5.90E-02	yes	yes	COPEC per PBT, freq of detect > 5%, and maximum detect > SRV
Nickel	7440-02-0	6/ 6	100	1.99E+01	--	no	3.30E+01	no	1.77E+01	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Nitrate/Nitrite		2/ 4	50	3.50E+00	--	no	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect > 5% and no SRV or background
Potassium	7440-09-7	6/ 6	100	9.66E+02	--	no	6.80E+03	no	1.95E+03	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Sodium	7440-23-5	1/ 6	17	7.66E+01	--	no	No SRV	No SRV	1.12E+02	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Sulfide	18496-25-8	4/ 4	100	1.10E+03	--	no	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect > 5%, no SRV or background
Vanadium	7440-62-2	6/ 6	100	1.32E+01	--	no	4.00E+01	no	2.61E+01	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Zinc	7440-66-6	6/ 6	100	1.24E+02	--	yes	1.60E+02	no	5.32E+02	no	yes	COPEC per PBT and freq of detect >5%

Table N-4. Data and Media Evaluations for Frequency of Detection, Sediment Reference Values and Background Comparison, and PBT Identification for Downstream Sediment at Sand Creek, Demolition Area 2 (continued)

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log Kow	Is the COI a PBT ^a ?	EOLP SRV (mg/kg)	Is Maximum Detect > SRV ^b ?	Site Background (mg/kg)	Is Maximum Detect > Background ^c ?	COPEC ^d ?	Justification
<i>Organics-Pesticides/PCBs</i>												
Dieldrin	60-57-1	1/4	25	6.40E-04	5.37E+00	yes	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
<i>Organics-Volatiles</i>												
2-Butanone	78-93-3	1/4	25	1.60E-02	2.90E-01	no	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect > 5% and no SRV or background
Chloromethane	74-87-3	1/4	25	4.00E-03	9.10E-01	no	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect > 5% and no SRV or background
Trichloroethene	79-01-6	1/3	33	3.80E-03	2.71E+00	no	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect > 5% and no SRV or background

^a"yes" = COI meets the criterion for being a PBT compound; else "no."

^b"yes" = COI maximum detect exceeds the SRV; else "no."

^c"yes" = Maximum detect is > than the background value; else "no."

^d"yes" = COI frequency of detection is > 5% and maximum detect exceeds the SRV or background value and/or the COI is a PBT; else "no."

CAS = Chemical Abstract Service.

COI = Chemical of interest.

COPEC = Constituent of potential ecological concern.

EOLP = Erie Ontario Lake Plain ecoregion (Ohio EPA 2003).

Log K_{ow} = Log of octanol-water partition coefficient (Kow).

PBT = Persistent, bioaccumulative, and toxic compound (inorganics include cadmium, lead, mercury, and zinc; organics include Log Kow of at least 3.0).

PCB = polychlorinated biphenyl.

SRV = Sediment reference value (Ohio EPA 2003).

-- = Not applicable, Kow applies only to organic compounds.

Table N-5. Data and Media Evaluations for Frequency of Detection, SRV and Background Comparison, and PBT Identification for Upstream Sediment at Sand Creek, Demolition Area 2

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log K _{ow}	Is the COI a PBT ^a ?	EOLP SRV (mg/kg)	Is Maximum Detect > SRV ^b ?	Site Background (mg/kg)	Is Maximum Detect > Background ^c ?	COPEC ^d ?	Justification
<i>Inorganics</i>												
Aluminum	7429-90-5	6/ 6	100	1.26E+04	--	no	2.90E+04	no	1.39E+04	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Arsenic	7440-38-2	6/ 6	100	1.81E+01	--	no	2.50E+01	no	1.95E+01	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Barium	7440-39-3	6/ 6	100	3.17E+02	--	no	1.90E+02	yes	1.23E+02	yes	yes	COPEC per freq of detect > 5%, maximum detect > SRV and background
Beryllium	7440-41-7	6/ 6	100	6.90E-01	--	no	8.00E-01	no	3.80E-01	yes	no	Not a COPEC per maximum detect < SRV and not a PBT
Cadmium	7440-43-9	6/ 6	100	2.30E+00	--	yes	7.90E-01	yes	no data	yes	yes	COPEC per PBT, freq of detect > 5%, also maximum detect is > SRV
Calcium	7440-70-2	6/ 6	100	3.52E+03	--	no	2.10E+0	no	5.51E+03	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Chromium	7440-47-3	6/ 6	100	1.73E+01	--	no	2.90E+01	no	1.81E+01	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Cobalt	7440-48-4	6/ 6	100	1.05E+01	--	no	1.20E+01	no	9.10E+00	yes	no	Not a COPEC per maximum detect < SRV and not a PBT
Copper	7440-50-8	6/ 6	100	6.07E+01	--	no	3.20E+01	yes	2.76E+01	yes	yes	COPEC per PBT, freq of detect > 5%, also maximum detect is > SRV
Iron	7439-89-6	6/ 6	100	3.01E+04	--	no	4.10E+04	no	2.82E+04	yes	no	Not a COPEC per maximum detect < SRV and not a PBT

Table N-5. Data and Media Evaluations for Frequency of Detection, SRV and Background Comparison, and PBT Identification for Upstream Sediment at Sand Creek, Demolition Area 2 (continued)

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/kg)	Log Kow	Is the COI a PBT ^a ?	EOLP SRV (mg/kg)	Is Maximum Detect > SRV ^b ?	Site Background (mg/kg)	Is Maximum Detect > Background ^c ?	COPEC ^d ?	Justification
Lead	7439-92-1	6/ 6	100	3.13E+01	--	yes	4.70E+01	no	2.74E+01	yes	Yes	COPEC per PBT, freq of detect > 5%, and maximum detect > background
Magnesium	7439-95-4	6/ 6	100	3.85E+03	--	no	7.10E+03	no	2.76E+03	yes	no	Not a COPEC per maximum detect < SRV and not a PBT
Manganese	7439-96-5	6/ 6	100	1.42E+03	--	no	1.50E+03	no	1.95E+03	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Mercury	7487-94-6	2/ 6	33	1.20E-01	--	yes	1.20E-01	no	5.90E-02	yes	yes	COPEC per PBT, freq of detect > 5%, and maximum detect is > SRV
Nickel	7440-02-0	6/ 6	100	2.43E+01	--	no	3.30E+01	no	1.77E+01	yes	no	Not a COPEC per maximum detect < SRV and not a PBT
Nitrate/Nitrite		1/ 4	25	4.90E+00	--	no	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect > 5% and no SRV or background
Potassium	7440-09-7	6/ 6	100	1.54E+03	--	no	6.80E+03	no	1.95E+03	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Sodium	7440-23-5	1/ 6	17	9.27E+01	--	no	No SRV	No SRV	1.12E+02	no	no	Not a COPEC per maximum detect < bkg and not a PBT
Sulfide	18496-25-8	3/ 4	75	7.60E+02	--	no	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect > 5%, no SRV or background
Vanadium	7440-62-2	6/ 6	100	2.10E+01	--	no	4.00E+01	no	2.61E+01	no	no	Not a COPEC per maximum detect < SRV and not a PBT
Zinc	7440-66-6	6/ 6	100	1.60E+02	--	yes	1.60E+02	no	5.32E+02	no	yes	COPEC per PBT and freq of detect >5%

Table N-5. Data and Media Evaluations for Frequency of Detection, SRV and Background Comparison, and PBT Identification for Upstream Sediment at Sand Creek, Demolition Area 2 (continued)

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect Detect (mg/kg)	Log Kow	Is the COI a PBT ^a ?	EOLP SRV (mg/kg)	Is Maximum Detect Detect > SRV ^b ?	Site Background (mg/kg)	Is Maximum Detect Detect > Background ^c ?	COPEC ^d ?	Justification
<i>Organics-Semivolatiles</i>												
Bis(2-ethylhexyl)phthalate	117-81-7	1/4	25	3.20E-02	7.60E+00	yes	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
Di-n-butylphthalate	84-74-2	3/4	75	2.00E-01	4.61E+00	yes	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
Fluoranthene	206-44-0	1/4	25	1.20E-01	5.12E+00	yes	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background
<i>Organics-Volatiles</i>												
2-Butanone	78-93-3	1/4	25	7.90E-03	2.90E-01	no	No SRV	No SRV	no data	yes	yes	COPEC per freq of detect > 5% and no SRV or background

^a"yes" = COI meets the criterion for being a PBT compound; else "no."

^b"yes" = COI maximum detect exceeds the SRV; else "no."

^c"yes" = Maximum detect is > than the background value; else "no."

^d"yes" = COI frequency of detection is > 5% and maximum detect exceeds the SRV or background value and/or the COI is a PBT; else "no."

CAS = Chemical Abstract Service.

COI = Chemical of interest.

COPEC = Constituent of potential ecological concern.

EOLP = Erie Ontario Lake Plain ecoregion (Ohio EPA 2003).

Log K_{ow} = Log of octanol-water partition coefficient (K_{ow}).

PBT = Persistent, bioaccumulative, and toxic compound (inorganics include cadmium, lead, mercury, and zinc; organics include Log Kow of at least 3.0).

SRV = Sediment reference value (Ohio EPA 2003).

-- = not applicable, Kow applies only to organic compounds.

Table N-6. Data and Media Evaluations for Frequency of Detection, Background Comparison, and PBT Identification for Downstream Surface Water at Sand Creek, Demolition Area 2

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/L)	Log Kow	Is the COI a PBT ^a ?	Site Background (mg/L)	Is Maximum Detect > Background ^b ?	COPEC ^c ?	Justification
<i>Inorganics</i>										
Aluminum	7429-90-5	4/ 8	50	2.36E+02	--	no	3.37E+03	no	no	Not a COPEC per maximum detect < background and not a PBT
Barium	7440-39-3	8/ 8	100	4.04E+01	--	no	4.75E+01	no	no	Not a COPEC per maximum detect < background and not a PBT
Calcium	7440-70-2	8/ 8	100	6.63E+04	--	no	4.14E+04	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Iron	7439-89-6	7/ 8	88	5.38E+02	--	no	2.56E+03	no	no	Not a COPEC per maximum detect < background and not a PBT
Magnesium	7439-95-4	8/ 8	100	1.72E+04	--	no	1.08E+04	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Manganese	7439-96-5	8/ 8	100	9.62E+01	--	no	3.91E+02	no	no	Not a COPEC per maximum detect < background and not a PBT
Nitrate/Nitrite		5/ 8	62	2.40E+02	--	no	no data	yes	yes	COPEC per freq of detect > 5% and maximum is > background
Potassium	7440-09-7	8/ 8	100	2.81E+03	--	no	3.17E+03	no	no	Not a COPEC per maximum detect < background and not a PBT
Sodium	7440-23-5	8/ 8	100	1.22E+04	--	no	2.13E+04	no	no	Not a COPEC per maximum detect < background and not a PBT
Sulfide	18496-25-8	1/ 8	12	2.20E+03	--	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
Zinc	7440-66-6	1/ 8	13	3.21E+01	--	yes	4.20E+01	no	yes	COPEC per PBT, freq of detect > 5%, and maximum detect > background
<i>Organics-Explosives</i>										
Nitrocellulose	9004-70-0	2/ 8	25	3.10E+01	No Kow	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
<i>Organics-Semivolatiles</i>										
Bis(2-ethylhexyl)phthalate	117-81-7	1/ 8	12	1.00E-01	7.60E+00	yes	no data	yes	yes	COPEC per freq of detect >5%, PBT compound, and no background

Table N-6. Data and Media Evaluations for Frequency of Detection, Background Comparison, and PBT Identification for Downstream Surface Water at Sand Creek, Demolition Area 2 (continued)

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/L)	Log Kow	Is the COI a PBT ^a ?	Site Background (mg/L)	Is Maximum Detect > Background ^b ?	COPEC ^c ?	Justification
<i>Organics-Volatiles</i>										
Carbon Disulfide	75-15-0	3/ 8	38	8.90E-03	2.00E+00	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
Chloroform	67-66-3	2/ 8	25	4.80E-03	1.92E+00	no	no data	yes	yes	COPEC per freq of detect > 5% and no background

^a"yes" = COI meets the criterion for being a PBT compound; else "no."

^b"yes" = Maximum detect is > than the background value; else "no."

^c"yes" = COI frequency of detection is > 5% and maximum detect exceeds the background value and/or the COI is a PBT; else "no."

CAS = Chemical Abstract Service.

COI = Chemical of interest.

COPEC = Constituent of potential ecological concern.

Log K_{ow} = Log of octanol-water partition coefficient (K_{ow}).

PBT = Persistent, bioaccumulative, and toxic compound (inorganics include cadmium, lead, mercury, and zinc; organics include Log Kow of at least 3.0).

-- = Not applicable, Kow applies only to organic compounds.

Table N-7. Data and Media Evaluations for Frequency of Detection, Background Comparison, and PBT Identification for Upstream Surface Water at Sand Creek, Demolition Area 2

Detected COI	CAS Registry Number	Frequency of Detect	% Results > Detect Limit	Maximum Detect (mg/L)	Log Kow	Is the COI a PBT ^a ?	Site Background (mg/L)	Is Maximum Detect > Background ^b ?	COPEC ^c ?	Justification
<i>Inorganics</i>										
Aluminum	7429-90-5	2/ 4	50	3.81E+02	--	no	3.37E+03	no	no	Not a COPEC per maximum detect < background and not a PBT
Barium	7440-39-3	4/ 4	100	3.73E+01	--	no	4.75E+01	no	no	Not a COPEC per maximum detect < background and not a PBT
Calcium	7440-70-2	4/ 4	100	6.92E+04	--	no	4.14E+04	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Chromium	7440-47-3	1/ 4	25	3.86E+01	--	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
Iron	7439-89-6	4/ 4	88	6.56E+02	--	no	2.56E+03	no	no	Not a COPEC per maximum detect < background and not a PBT
Magnesium	7439-95-4	4/ 4	100	1.74E+04	--	no	1.08E+04	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Manganese	7439-96-5	4/ 4	100	9.81E+01	--	no	3.91E+02	no	no	Not a COPEC per maximum detect < background and not a PBT
Nickel	7440-02-0	1/ 4	25	1.49E+01	--	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
Nitrate/Nitrite		4/ 4	100	2.30E+02	--	no	no data	yes	yes	COPEC per freq of detect > 5% and maximum detect > background
Potassium	7440-09-7	4/ 4	100	2.86E+03	--	no	3.17E+03	no	no	Not a COPEC per maximum detect < background and not a PBT
Sodium	7440-23-5	4/ 4	100	1.33E+04	--	no	2.13E+04	no	no	Not a COPEC per maximum detect < background and not a PBT
<i>Organics-Explosives</i>										
Nitrocellulose	9004-70-0	1/ 4	25	2.20E+02	No Kow	no	no data	yes	yes	COPEC per freq of detect > 5% and no background
<i>Organics-Volatiles</i>										
Chloroform	67-66-3	1/ 4	25	1.90E+00	1.92E+00	no	no data	yes	yes	COPEC per freq of detect > 5% and no background

^a"yes" = COI meets the criterion for being a PBT compound; else "no."

^b"yes" = Maximum detect is > than the background value; else "no."

^c"yes" = COI frequency of detection is > 5% and maximum detect exceeds the background value and/or the COI is a PBT; else "no."

CAS = Chemical Abstract Service.

COI = Chemical of interest.

COPEC = Constituent of potential ecological concern.

Log K_{ow} = Log of octanol-water partition coefficient (K_{ow}).

PBT = Persistent, bioaccumulative, and toxic compound (inorganics include cadmium, lead, mercury, and zinc; organics include Log Kow of at least 3.0).

-- = Not applicable, Kow applies only to organic compounds.

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Table N-8. Soil Ecological Screening Values for Level II Screen for Demolition Area 2

Chemicals of Interest	CAS Registry Number	Soil Screening Values											
		Efroymsen et al. (1997a) Preliminary Remediation Goals for Ecological Endpoints ^a		Screening Value for Earthworms and Soil Microorganisms (Efroymsen et al. 1997b) ^b				Soil Screening Values for Plants (Efroymsen et al. 1997c) ^c		Ecological Screening Level (ESL) ^d		Preferred Ecological Screening Value (ESV) ^e	
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source (Soil) (Solution)	Number (mg/kg)	Source	Number (mg/kg)	Source
Inorganics (Target Analyte List)													
Aluminum	7429-90-5	--		--		600	LOEC	50	Soil, LOEC	--		6.00E+02	LOEC
Antimony	7440-36-0	5	PRGs	--		--		5	Soil, LOEC	0.1423	ESL EPA Region 5 (2003)	5.00E+00	PRGs
Arsenic	7440-38-2	9.9	PRGs	60	LOEC	100	LOEC	10	Soil, NOEC	5.7	ESL EPA Region 5 (2003)	9.90E+00	PRGs
Barium	7440-39-3	283	PRGs	--		3000	LOEC	500	Soil, LOEC	1.04	ESL EPA Region 5 (2003)	2.83E+02	PRGs
Beryllium		10	PRGs							1.06	ESL EPA Region 5 (2003)	1.00E+01	PRGs
Bismuth	7440-69-9	--		--		--		20	No Soil, only Solution, LOEC	--		2.00E+01	No Soil, only Solution, LOEC
Boron	7440-42-8	0.5	PRGs	--		20	LOEC	0.5	Soil, LOEC	--		5.00E-01	PRGs
Bromine	7726-95-6	10	PRGs	--		--		10	Soil, LOEC	--		1.00E+01	PRGs
Cadmium	7440-43-9	4	PRGs	20	LOEC	20	LOEC	4	Soil, LOEC	0.00222	ESL EPA Region 5 (2003)	4.00E+00	PRGs
Calcium	7440-70-2	--		--		--		--		--		No ESV	No Source
Chromium	16065-83-1	0.4	PRGs	0.4	LOEC	10	NOEC	1	Soil, LOEC	0.4	ESL EPA Region 5 (2003)	4.00E-01	PRGs
Chromium, hexavalent	18540-29-9	0.4	PRGs	0.4	LOEC	10	NOEC	1	Soil, LOEC	--		4.00E-01	PRGs
Cobalt	7440-48-4	20	PRGs	--		1000	LOEC	20	Soil, LOEC	0.14033	ESL EPA Region 5 (2003)	2.00E+01	PRGs
Copper	7440-50-8	60	PRGs	60	LOEC	100	LOEC	100	Soil, NOEC	5.4	ESL EPA Region 5 (2003)	1.39E+01	PPL (SAIC 2002)
Cyanide	57-12-5	--		--		--		--		1.33	ESL EPA Region 5 (2003)	1.08E+00	PPL (SAIC 2002)
Fluorine	7782-41-4	200	PRGs	--		30	LOEC	200	Soil, LOEC	--		2.00E+02	PRGs
Iodine	7553-56-2	4	PRGs	--		--		4	Soil, LOEC	--		4.00E+00	PRGs
Iron	7439-89-6	--		--		200	NOEC	10	No Soil, only Solution, LOEC	--		2.00E+02	NOEC
Lanthanum	7439-91-0	--		--		50	LOEC	--		--		5.00E+01	LOEC
Lead	7439-92-1	40.5	PRGs	500	NOEC	900	NOEC	50	Soil, NOEC	0.05373	ESL EPA Region 5 (2003)	4.05E+01	PRGs
Lithium	7439-93-2	2	PRGs	--		10	LOEC	2	Soil, LOEC	--		2.00E+00	PRGs
Magnesium	7439-95-4	--		--		--		--		--		No ESV	No Source
Manganese	7439-96-5	--		--		100	LOEC	500	Soil, LOEC	--		1.00E+02	LOEC
Mercury	7439-97-6	0.00051	PRGs	0.1	LOEC	30	NOEC	0.3	Soil, LOEC	0.1	ESL EPA Region 5 (2003)	5.10E-04	PRGs
Molybdenum	7439-98-7	2	PRGs	--		200	LOEC	2	Soil, LOEC	--		2.00E+00	PRGs
Nickel	7440-02-0	30	PRGs	200	NOEC	90	LOEC	30	Soil, NOEC	13.6	ESL EPA Region 5 (2003)	3.00E+01	PRGs
Nitrate/nitrite		--		--		--		--		--		No ESV	No Source
Potassium	7440-09-7	--		--		--		--		--		No ESV	No Source
Selenium	7782-49-2	0.21	PRGs	70	LOEC	100	LOEC	1	Soil, LOEC	0.02765	ESL EPA Region 5 (2003)	2.10E-01	PRGs
Silver	7440-22-4	2	PRGs	--		50	NOEC	2	Soil, LOEC	4.04	ESL EPA Region 5 (2003)	2.00E+00	PRGs
Sodium	7440-23-5	--		--		--		--		--		No ESV	No Source
Sulfide	18496-25-8	--		--		--		--		0.00358	ESL EPA Region 5 (2003)	3.58E-03	ESL EPA Region 5 (2003)
Technetium	7440-26-8	0.2	PRGs	--		--		0.2	Soil, NOEC	--		2.00E-01	PRGs
Tellurium	13494-80-9	--		--		--		2	No Soil, only Solution, LOEC	--		2.00E+00	No Soil, only Solution, LOEC

Table N-8. Soil Ecological Screening Values for Level II Screen for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Soil Screening Values											
		Efroymsen et al. (1997a) Preliminary Remediation Goals for Ecological Endpoints ^a		Screening Value for Earthworms and Soil Microorganisms (Efroymsen et al. 1997b) ^b				Soil Screening Values for Plants (Efroymsen et al. 1997c) ^c		Ecological Screening Level (ESL) ^d		Preferred Ecological Screening Value (ESV) ^e	
				Benchmarks for Earthworm		Benchmarks for Soil Microorganism							
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source
Thallium	7440-28-0	1	PRGs	--		--		1	Soil, LOEC	0.05692	ESL EPA Region 5 (2003)	1.00E+00	PRGs
Tin	7440-31-5	50	PRGs	--		2000	LOEC	50	Soil, LOEC	7.62	ESL EPA Region 5 (2003)	5.00E+01	PRGs
Titanium	7440-32-6	--		--		1000	LOEC	0.06	No Soil, only Solution, LOEC	--		1.00E+03	LOEC
Tungsten	7440-33-7	--		--		400	NOEC	--		--		4.00E+02	NOEC
Uranium	7440-61-1	5	PRGs	--		--		5	Soil, NOEC	--		5.00E+00	PRGs
Vanadium	7440-62-2	2	PRGs	--		20	LOEC	2	Soil, LOEC	1.59	ESL EPA Region 5 (2003)	2.00E+00	PRGs
Zinc	7440-66-6	8.5	PRGs	--		20	LOEC	2	Soil, LOEC	1.59	ESL EPA Region 5 (2003)	2.00E+00	PRGs
Organic Compounds													
Acenaphthene	83-32-9	20	PRGs	--		--		20	Soil, LOEC	682		2.00E+01	PRGs
Acenaphthylene	208-96-8	--		--		--		--		682		6.82E+02	No Source
Acetone	67-64-1	--		--		--		--		2.5	ESL EPA Region 5 (2003)	2.50E+00	ESL EPA Region 5 (2003)
Acrylonitrile	107-13-1	--		--		1000	LOEC	--		1.37		1.00E+03	LOEC
Aldrin	309-00-2	--		--		--		--		0.00332		3.32E-03	No Source
4-Aminobiphenyl	92-67-1	--		--		--		--		0.00305	ESL EPA Region 5 (2003)	3.05E-03	ESL EPA Region 5 (2003)
2-Amino-4,6-dinitrotoluene	35572-78-2	--		--		--		--		--		No ESV	No Source
4-Amino-2,6-dinitrotoluene	19406-51-0	--		--		--		--		--		No ESV	No Source
Aniline	62-53-3	--		--		--		200	No Soil, only Solution, LOEC	0.05678	ESL EPA Region 5 (2003)	2.00E+02	No Soil, only Solution, LOEC
Anthracene	120-12-7	--		--		--		--		1480	ESL EPA Region 5 (2003)	1.48E+03	ESL EPA Region 5 (2003)
PCB-1016	12674-11-2	--		--		--		--		--		No ESV	No Source
Arochlor-1221	11104-28-2	--		--		--		--		--		No ESV	No Source
Arochlor-1232	11141-16-5	--		--		--		--		--		No ESV	No Source
Arochlor-1242	53469-21-9	--		--		--		--		--		No ESV	No Source
Arochlor-1248	12672-29-6	--		--		--		--		--		No ESV	No Source
PCB-1254	11097-69-1	--		--		--		--		--		No ESV	No Source
Arochlor-1260	11096-82-5	--		--		--		--		--		No ESV	No Source
Benzene	71-43-2	--		--		--		--		0.25462	ESL EPA Region 5 (2003)	2.55E-01	ESL EPA Region 5 (2003)
Benzo(a)anthracene	56-55-3	--		--		--		--		5.21	ESL EPA Region 5 (2003)	5.21E+00	ESL EPA Region 5 (2003)
Benzo(a)pyrene	50-32-8	--		--		--		--		1.52	ESL EPA Region 5 (2003)	1.52E+00	ESL EPA Region 5 (2003)
Benzo(b)fluoranthene	205-99-2	--		--		--		--		59.8	ESL EPA Region 5 (2003)	5.98E+01	ESL EPA Region 5 (2003)
Benzo(g,h,i)perylene	191-24-2	--		--		--		--		119	ESL EPA Region 5 (2003)	1.19E+02	ESL EPA Region 5 (2003)
Benzo(k)fluoranthene	207-08-9	--		--		--		--		148	ESL EPA Region 5 (2003)	1.48E+02	ESL EPA Region 5 (2003)
BHC	608-73-1	--		--		--		--		--		No ESV	No Source
BHC, alpha	319-84-6	--		--		--		--		0.09939	ESL EPA Region 5 (2003)	9.94E-02	ESL EPA Region 5 (2003)
beta-BHC	319-85-7	--		--		--		--		0.00398	ESL EPA Region 5 (2003)	3.98E-03	ESL EPA Region 5 (2003)
BHC, delta	319-86-8	--		--		--		--		9.94	ESL EPA Region 5 (2003)	9.94E+00	ESL EPA Region 5 (2003)
BHC, gamma	58-89-9	--		--		--		--		0.005	ESL EPA Region 5 (2003)	5.00E-03	ESL EPA Region 5 (2003)
Biphenyl	92-52-4	60	PRGs	--		--		60	Soil, LOEC	--		6.00E+01	PRGs
bis(2-chloroethoxy) methane	111-91-1	--		--		--		--		0.302	ESL EPA Region 5 (2003)	3.02E-01	ESL EPA Region 5 (2003)
bis(2-Chloroethyl) ether	111-44-4	--		--		--		--		23.7	ESL EPA Region 5 (2003)	2.37E+01	ESL EPA Region 5 (2003)

Table N-8. Soil Ecological Screening Values for Level II Screen for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Soil Screening Values											
		Efroymsen et al. (1997a) Preliminary Remediation Goals for Ecological Endpoints ^a		Screening Value for Earthworms and Soil Microorganisms (Efroymsen et al. 1997b) ^b				Soil Screening Values for Plants (Efroymsen et al. 1997c) ^c		Ecological Screening Level (ESL) ^d		Preferred Ecological Screening Value (ESV) ^e	
				Benchmarks for Earthworm		Benchmarks for Soil Microorganism							
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source
bis(2-Ethylhexyl)phthalate	117-81-7	--		--		--		--		0.92594	ESL EPA Region 5 (2003)	9.26E-01	ESL EPA Region 5 (2003)
4-Bromoaniline	106-40-1	--		--		--		100	No Soil, only Solution, LOEC	--		1.00E+02	No Soil, only Solution, LOEC
Bromodichloromethane	75-27-4	--		--		--		--		0.54	ESL EPA Region 5 (2003)	5.40E-01	ESL EPA Region 5 (2003)
Bromoform	75-25-2	--		--		--		--		15.9	ESL EPA Region 5 (2003)	1.59E+01	ESL EPA Region 5 (2003)
Bromomethane	74-83-9	--		--		--		--		--		No ESV	No Source
4-bromophenyl-phenylether	101-55-3	--		--		--		--		--		No ESV	No Source
2-Butanone	78-93-3	--		--		--		--		89.6	ESL EPA Region 5 (2003)	8.96E+01	ESL EPA Region 5 (2003)
Butylbenzyl phthalate	85-68-7	--		--		--		--		0.239	ESL EPA Region 5 (2003)	2.39E-01	ESL EPA Region 5 (2003)
N-Nitrosodi-n-Butylamine	924-16-3	--		--		--		--		0.26707	ESL EPA Region 5 (2003)	2.67E-01	ESL EPA Region 5 (2003)
Carbazole	86-74-8	--		--		--		--		--		No ESV	No Source
Carbon disulfide	75-15-0	--		--		--		--		0.09412	ESL EPA Region 5 (2003)	9.41E-02	ESL EPA Region 5 (2003)
Carbon tetrachloride	56-23-5	--		--		1000	LOEC	--		2.98	ESL EPA Region 5 (2003)	1.00E+03	LOEC
Chloroacetamide	79-07-2	2	PRGs	2	LOEC	--		--		--		2.00E+00	PRGs
p-chloroaniline	106-47-8	--		--		--		--		1.1	ESL EPA Region 5 (2003)	1.10E+00	ESL EPA Region 5 (2003)
3-Chloroaniline	108-42-9	20	PRGs	30	LOEC	--		20	Soil, LOEC	--		2.00E+01	PRGs
4-chloroaniline	106-47-8	--		--		--		--		1.1	ESL EPA Region 5 (2003)	1.10E+00	ESL EPA Region 5 (2003)
Chlorobenzene	108-90-7	40	PRGs	40	LOEC	--		--		13.1	ESL EPA Region 5 (2003)	4.00E+01	PRGs
Chlorobenzilate	510-15-6	--		--		--		--		5.05	ESL EPA Region 5 (2003)	5.05E+00	ESL EPA Region 5 (2003)
Chlordane	12789-03-6	--		--		--		--		0.224	ESL EPA Region 5 (2003)	2.24E-01	ESL EPA Region 5 (2003)
alpha-Chlordane	12789-03-6	--		--		--		--		0.224	ESL EPA Region 5 (2003)	2.24E-01	ESL EPA Region 5 (2003)
gamma-Chlordane	12789-03-6	--		--		--		--		0.224	ESL EPA Region 5 (2003)	2.24E-01	ESL EPA Region 5 (2003)
Chloroethane	75-00-3	--		--		--		--		--		No ESV	No Source
Chloroform	67-66-3	--		--		--		--		1.19	ESL EPA Region 5 (2003)	1.19E+00	ESL EPA Region 5 (2003)
Chloromethane	74-87-3	--		--		--		--		--		No ESV	No Source
2-Chloronaphthalene	91-58-7	--		--		--		--		0.0122	ESL EPA Region 5 (2003)	1.22E-02	ESL EPA Region 5 (2003)
2-Chlorophenol	95-57-8	--		--		--		60	No Soil, only Solution, LOEC	0.243	ESL EPA Region 5 (2003)	6.00E+01	No Soil, only Solution, LOEC
3-Chlorophenol	108-43-0	7	PRGs	10	LOEC	--		7	Soil, LOEC	--		7.00E+00	PRGs
4-Chlorophenol	106-48-9	--		--		--		50	No Soil, only Solution, LOEC	--		5.00E+01	No Soil, only Solution, LOEC
4-Chlorophenyl-phenyl ether	7005-72-3	--		--		--		--		--		No ESV	No Source
4-chloro-3-methylphenol	59-50-7	--		--		--		--		--		No ESV	No Source
Chloropropene	107-05-1	--		--		--		--		0.0029	ESL EPA Region 5 (2003)	2.90E-03	ESL EPA Region 5 (2003)
Chrysene	218-01-9	--		--		--		--		4.73	ESL EPA Region 5 (2003)	4.73E+00	ESL EPA Region 5 (2003)
4,6-dinitro-o-Cresol	534-52-1	--		--		--		--		0.144	ESL EPA Region 5 (2003)	1.44E-01	ESL EPA Region 5 (2003)
m-Cresol	108-39-4	--		--		--		--		3.49	ESL EPA Region 5 (2003)	3.49E+00	ESL EPA Region 5 (2003)
o-Cresol	95-48-7	--		--		--		--		40.4	ESL EPA Region 5 (2003)	4.04E+01	ESL EPA Region 5 (2003)
2-Cresol	95-48-7	--		--		--		--		40.4	ESL EPA Region 5 (2003)	4.04E+01	ESL EPA Region 5 (2003)
p-chloro-m-Cresol	59-50-7	--		--		--		--		7.95	ESL EPA Region 5 (2003)	7.95E+00	ESL EPA Region 5 (2003)
p-Cresol	106-44-5	--		--		--		--		163	ESL EPA Region 5 (2003)	1.63E+02	ESL EPA Region 5 (2003)
Diallylate	2303-16-4	--		--		--		--		0.452	ESL EPA Region 5 (2003)	4.52E-01	ESL EPA Region 5 (2003)
2,4-D	94-75-7	--		--		--		--		0.0272	ESL EPA Region 5 (2003)	2.72E-02	ESL EPA Region 5 (2003)

Table N-8. Soil Ecological Screening Values for Level II Screen for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Soil Screening Values											
		Efroymsen et al. (1997a) Preliminary Remediation Goals for Ecological Endpoints ^a		Screening Value for Earthworms and Soil Microorganisms (Efroymsen et al. 1997b) ^b				Soil Screening Values for Plants (Efroymsen et al. 1997c) ^c		Ecological Screening Level (ESL) ^d		Preferred Ecological Screening Value (ESV) ^e	
				Benchmarks for Earthworm		Benchmarks for Soil Microorganism							
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source (Soil) (Solution)	Number (mg/kg)	Source	Number (mg/kg)	Source
4,4'-DDD	72-54-8	--		--		--		--		0.758	ESL EPA Region 5 (2003)	7.58E-01	ESL EPA Region 5 (2003)
4,4'-DDE	72-55-9	--		--		--		--		0.596	ESL EPA Region 5 (2003)	5.96E-01	ESL EPA Region 5 (2003)
4,4'-DDT	50-29-3	--		--		--		--		0.0035	ESL EPA Region 5 (2003)	3.50E-03	ESL EPA Region 5 (2003)
Diazinon	333-41-5	--		--		--		--		--		No ESV	No Source
Dibenzo(a,h)anthracene	53-70-3	--		--		--		--		18.4	ESL EPA Region 5 (2003)	1.84E+01	ESL EPA Region 5 (2003)
Dibenzofuran	132-64-9	--		--		--		--		--		No ESV	No Source
1,2-Dibromo-3-Chloropropane	96-12-8	--		--		--		--		0.0352	ESL EPA Region 5 (2003)	3.52E-02	ESL EPA Region 5 (2003)
Dibromochloromethane	124-48-1	--		--		--		--		2.05	ESL EPA Region 5 (2003)	2.05E+00	ESL EPA Region 5 (2003)
Dibromoethane	106-93-4	--		--		--		--		1.23	ESL EPA Region 5 (2003)	1.23E+00	ESL EPA Region 5 (2003)
2,4-Dichloroaniline	554-00-7	100	PRGs	100	NOEC	--		--		--		1.00E+02	PRGs
3,4-Dichloroaniline	95-76-1	20	PRGs	20	LOEC	--		--	No Soil, only Solution, LOEC	--		2.00E+01	PRGs
o-Dichlorobenzene	95-50-1	--		--		--		--		2.96	ESL EPA Region 5 (2003)	2.96E+00	ESL EPA Region 5 (2003)
p-Dichlorobenzene	106-46-7	20	PRGs	20	LOEC	--		--		0.546	ESL EPA Region 5 (2003)	2.00E+01	PRGs
1,2-Dichlorobenzene	95-50-1	--		--		--		--		2.96	ESL EPA Region 5 (2003)	2.96E+00	ESL EPA Region 5 (2003)
1,3-Dichlorobenzene	541-73-1	--		--		--		--		37.7	ESL EPA Region 5 (2003)	3.77E+01	ESL EPA Region 5 (2003)
1,4-Dichlorobenzene	106-46-7	20	PRGs	20	LOEC	--		--		0.546	ESL EPA Region 5 (2003)	2.00E+01	PRGs
3,3'-Dichlorobenzidine	91-94-1	--		--		--		--		0.646	ESL EPA Region 5 (2003)	6.46E-01	ESL EPA Region 5 (2003)
cis-1,4-dichloro-2-butene	1476-11-5	--		--		1000	LOEC	--		--		1.00E+03	LOEC
trans-1,4-dichloro-2-butene	110-57-6	--		--		1000	LOEC	--		--		1.00E+03	LOEC
1,1-Dichloroethane	75-34-3	--		--		--		--		20.1	ESL EPA Region 5 (2003)	2.01E+01	ESL EPA Region 5 (2003)
1,2-Dichloroethane	107-06-2	--		--		--		--		21.2	ESL EPA Region 5 (2003)	2.12E+01	ESL EPA Region 5 (2003)
1,1-Dichloroethene	75-35-4	--		--		--		--		8.28	ESL EPA Region 5 (2003)	8.28E+00	ESL EPA Region 5 (2003)
1,2-Dichloroethene	540-59-0	--		--		--		--		--		No ESV	No Source
Dichlorodifluoromethane	75-71-8	--		--		--		--		39.5	ESL EPA Region 5 (2003)	3.95E+01	ESL EPA Region 5 (2003)
2,4-Dichlorophenol	120-83-2	--		--		--		20	No Soil, only Solution, LOEC	87.5	ESL EPA Region 5 (2003)	2.00E+01	No Soil, only Solution, LOEC
2,6-Dichlorophenol	87-65-0	--		--		--		--		1.17	ESL EPA Region 5 (2003)	1.17E+00	ESL EPA Region 5 (2003)
3,4-Dichlorophenol	95-77-2	20	PRGs	20	LOEC	--		20	Soil, LOEC	--		2.00E+01	PRGs
1,2-Dichloropropane	78-87-5	700	PRGs	700	LOEC	--		--		32.7	ESL EPA Region 5 (2003)	7.00E+02	PRGs
cis-1,3-Dichloropropene	10061-01-5	--		--		--		--		0.398	ESL EPA Region 5 (2003)	3.98E-01	ESL EPA Region 5 (2003)
trans-1,3-Dichloropropene	10061-02-6	--		--		--		--		0.398	ESL EPA Region 5 (2003)	3.98E-01	ESL EPA Region 5 (2003)
Dieldrin	60-57-1	--		--		--		--		0.00238	ESL EPA Region 5 (2003)	2.38E-03	ESL EPA Region 5 (2003)
Diethylphthalate	84-66-2	100	PRGs	--		--		100	Soil, LOEC	24.8	ESL EPA Region 5 (2003)	1.00E+02	PRGs
3,3'-Dimethylbenzidine	119-93-7	--		--		--		--		0.104	ESL EPA Region 5 (2003)	1.04E-01	ESL EPA Region 5 (2003)
Dimethoate	60-51-5	--		--		--		--		0.218	ESL EPA Region 5 (2003)	2.18E-01	ESL EPA Region 5 (2003)
7,12'-Dimethylbenz(a)anthracene	57-97-6	--		--		--		--		16.3	ESL EPA Region 5 (2003)	1.63E+01	ESL EPA Region 5 (2003)
Dimethylphthalate	131-11-3	200	PRGs	200	LOEC	--		--		734	ESL EPA Region 5 (2003)	2.00E+02	PRGs
alpha,alpha-Dimethylphenethylamine	122-09-8	--		--		--		--		0.3	ESL EPA Region 5 (2003)	3.00E-01	ESL EPA Region 5 (2003)
2,4-Dimethylphenol	105-67-9	--		--		--		--		0.01	ESL EPA Region 5 (2003)	1.00E-02	ESL EPA Region 5 (2003)
Di-n-butylphthalate	84-74-2	200	PRGs	--		--		200	Soil, NOEC	0.15	ESL EPA Region 5 (2003)	2.00E+02	PRGs
Di-n-octylphthalate	117-84-0	--		--		--		--		709	ESL EPA Region 5 (2003)	7.09E+02	ESL EPA Region 5 (2003)

Table N-8. Soil Ecological Screening Values for Level II Screen for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Soil Screening Values											
		Efroymsen et al. (1997a) Preliminary Remediation Goals for Ecological Endpoints ^a		Screening Value for Earthworms and Soil Microorganisms (Efroymsen et al. 1997b) ^b				Soil Screening Values for Plants (Efroymsen et al. 1997c) ^c		Ecological Screening Level (ESL) ^d		Preferred Ecological Screening Value (ESV) ^e	
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source (Soil) (Solution)	Number (mg/kg)	Source	Number (mg/kg)	Source
m-Dinitrobenzene	99-65-0	--		--		--		--		0.655	ESL EPA Region 5 (2003)	6.55E-01	ESL EPA Region 5 (2003)
1,3-Dinitrobenzene	99-65-0	--		--		--		--		0.655	ESL EPA Region 5 (2003)	6.55E-01	ESL EPA Region 5 (2003)
2,4-Dinitrophenol	51-28-5	20	PRGs	--		--		20	Soil, NOEC	0.0609	ESL EPA Region 5 (2003)	2.00E+01	PRGs
2,4-Dinitrotoluene	121-14-2	--		--		--		--		1.28	ESL EPA Region 5 (2003)	1.28E+00	ESL EPA Region 5 (2003)
2,6-Dinitrotoluene	606-20-2	--		--		--		--		0.0328	ESL EPA Region 5 (2003)	3.28E-02	ESL EPA Region 5 (2003)
4,6-Dinitro-2-methylphenol	534-52-1	--		--		--		--		--		No ESV	No Source
Dinoseb	88-85-7	--		--		--		--		0.0218	ESL EPA Region 5 (2003)	2.18E-02	ESL EPA Region 5 (2003)
1,4-Dioxane	123-91-1	--		--		--		--		2.05	ESL EPA Region 5 (2003)	2.05E+00	ESL EPA Region 5 (2003)
Diphenylamine	122-39-4	--		--		--		--		1.01	ESL EPA Region 5 (2003)	1.01E+00	ESL EPA Region 5 (2003)
Disulfoton	298-04-4	--		--		--		--		0.0199	ESL EPA Region 5 (2003)	1.99E-02	ESL EPA Region 5 (2003)
Endosulfan, alpha	959-98-8	--		--		--		--		0.119	ESL EPA Region 5 (2003)	1.19E-01	ESL EPA Region 5 (2003)
Endosulfan, beta	33213-65-9	--		--		--		--		0.119	ESL EPA Region 5 (2003)	1.19E-01	ESL EPA Region 5 (2003)
Endosulfan, mixed isomers		--		--		--		--		--		No ESV	No Source
Endosulfan sulfate	1031-07-8	--		--		--		--		0.0358	ESL EPA Region 5 (2003)	3.58E-02	ESL EPA Region 5 (2003)
Endrin	72-20-8	--		--		--		--		0.0101	ESL EPA Region 5 (2003)	1.01E-02	ESL EPA Region 5 (2003)
Endrin aldehyde	7421-93-4	--		--		--		--		0.0105	ESL EPA Region 5 (2003)	1.05E-02	ESL EPA Region 5 (2003)
Ethyl methacrylate	97-63-2	--		--		--		--		30	ESL EPA Region 5 (2003)	3.00E+01	ESL EPA Region 5 (2003)
Ethylbenzene	100-41-4	--		--		--		--		5.16	ESL EPA Region 5 (2003)	5.16E+00	ESL EPA Region 5 (2003)
Famphur	52-85-7	--		--		--		--		0.0497	ESL EPA Region 5 (2003)	4.97E-02	ESL EPA Region 5 (2003)
Fluoranthene	206-44-0	--		--		--		--		122	ESL EPA Region 5 (2003)	1.22E+02	ESL EPA Region 5 (2003)
Fluorene	86-73-7	30	PRGs	30	LOEC	--		--		122	ESL EPA Region 5 (2003)	3.00E+01	PRGs
Furan	110-00-9	600	PRGs	--		--		600	Soil, LOEC	--		6.00E+02	PRGs
gamma-BHC (lindane)	58-89-9	--		--		--		--		0.005	ESL EPA Region 5 (2003)	5.00E-03	ESL EPA Region 5 (2003)
Heptane	142-82-5	--		--		--		1	No Soil, only Solution, LOEC	--		1.00E+00	No Soil, only Solution, LOEC
Heptachlor	76-44-8	--		--		--		--		0.00598	ESL EPA Region 5 (2003)	5.98E-03	ESL EPA Region 5 (2003)
Heptachlor Epoxide	1024-57-3	--		--		--		--		0.152	ESL EPA Region 5 (2003)	1.52E-01	ESL EPA Region 5 (2003)
Hexachlorobenzene	118-74-1	--		--		1000	LOEC	--		0.199	ESL EPA Region 5 (2003)	1.00E+03	LOEC
Hexachlorobutadiene	87-68-3	--		--		--		--		0.0398	ESL EPA Region 5 (2003)	3.98E-02	ESL EPA Region 5 (2003)
Hexachlorocyclopentadiene	77-47-4	10	PRGs	--		--		10	Soil, LOEC	0.755	ESL EPA Region 5 (2003)	1.00E+01	PRGs
Hexachloroethane	67-72-1	--		--		--		--		0.596	ESL EPA Region 5 (2003)	5.96E-01	ESL EPA Region 5 (2003)
Hexachlorophene	70-30-4	--		--		--		--		0.199	ESL EPA Region 5 (2003)	1.99E-01	ESL EPA Region 5 (2003)
2-Hexanone	591-78-6	--		--		--		--		12.6	ESL EPA Region 5 (2003)	1.26E+01	ESL EPA Region 5 (2003)
HMX	2691-41-0	--		--		--		--		--		No ESV	No Source
Indeno(1,2,3-cd)pyrene	193-39-5	--		--		--		--		109	ESL EPA Region 5 (2003)	1.09E+02	ESL EPA Region 5 (2003)
Isobutyl alcohol	78-83-1	--		--		--		--		20.8	ESL EPA Region 5 (2003)	2.08E+01	ESL EPA Region 5 (2003)
Isodrin	465-73-6	--		--		--		--		0.00332	ESL EPA Region 5 (2003)	3.32E-03	ESL EPA Region 5 (2003)
Isophorone	78-59-1	--		--		--		--		139	ESL EPA Region 5 (2003)	1.39E+02	ESL EPA Region 5 (2003)
Isosafrole	120-58-1	--		--		--		--		9.94	ESL EPA Region 5 (2003)	9.94E+00	ESL EPA Region 5 (2003)
Kepone	143-50-0	--		--		--		--		0.0327	ESL EPA Region 5 (2003)	3.27E-02	ESL EPA Region 5 (2003)
Malathion	121-75-5	--		--		--		--		--		No ESV	No Source
Methacrylonitrile	126-98-7	--		--		--		--		0.057	ESL EPA Region 5 (2003)	5.70E-02	ESL EPA Region 5 (2003)
Methapyrilene	91-80-5	--		--		--		--		2.78	ESL EPA Region 5 (2003)	2.78E+00	ESL EPA Region 5 (2003)

Table N-8. Soil Ecological Screening Values for Level II Screen for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Soil Screening Values											
		Efroymsen et al. (1997a) Preliminary Remediation Goals for Ecological Endpoints ^a		Screening Value for Earthworms and Soil Microorganisms (Efroymsen et al. 1997b) ^b				Soil Screening Values for Plants (Efroymsen et al. 1997c) ^c		Ecological Screening Level (ESL) ^d		Preferred Ecological Screening Value (ESV) ^e	
				Benchmarks for Earthworm		Benchmarks for Soil Microorganism							
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source (Soil) (Solution)	Number (mg/kg)	Source	Number (mg/kg)	Source
Methoxychlor	72-43-5	--		--		--		--		0.0199	ESL EPA Region 5 (2003)	1.99E-02	ESL EPA Region 5 (2003)
Methyl bromide	74-83-9	--		--		--		--		0.235	ESL EPA Region 5 (2003)	2.35E-01	ESL EPA Region 5 (2003)
Methyl chloride	74-87-3	--		--		--		--		10.4	ESL EPA Region 5 (2003)	1.04E+01	ESL EPA Region 5 (2003)
Methyl iodide	74-88-4	--		--		--		--		1.23	ESL EPA Region 5 (2003)	1.23E+00	ESL EPA Region 5 (2003)
Methylene chloride	75-09-2	--		--		--		--		1.05	ESL EPA Region 5 (2003)	1.05E+00	ESL EPA Region 5 (2003)
2-Methylnaphthalene	91-57-6	--		--		--		--		3.24	ESL EPA Region 5 (2003)	3.24E+00	ESL EPA Region 5 (2003)
2-Methylphenol	95-48-7	--		--		--		--		--		No ESV	No Source
4-Methylphenol	106-44-5	--		--		--		--		--		No ESV	No Source
4-Methyl-2-pentanone	108-10-1	--		--		--		--		443	ESL EPA Region 5 (2003)	4.43E+02	ESL EPA Region 5 (2003)
Mirex	2385-85-5	--		--		--		--		--		No ESV	No Source
Naphthalene	91-20-3	--		--		--		10	No Soil, only Solution, LOEC	0.0994	ESL EPA Region 5 (2003)	1.00E+01	No Soil, only Solution, LOEC
1-Naphthylamine	134-32-7	--		--		--		--		9.34	ESL EPA Region 5 (2003)	9.34E+00	ESL EPA Region 5 (2003)
2-Naphthylamine	91-59-8	--		--		--		--		3.03	ESL EPA Region 5 (2003)	3.03E+00	ESL EPA Region 5 (2003)
1,4-Naphthoquinone	130-15-4	--		--		--		--		1.67	ESL EPA Region 5 (2003)	1.67E+00	ESL EPA Region 5 (2003)
m-Nitroaniline	99-09-2	--		--		--		--		3.16	ESL EPA Region 5 (2003)	3.16E+00	ESL EPA Region 5 (2003)
o-Nitroaniline	88-74-4	--		--		--		--		74.1	ESL EPA Region 5 (2003)	7.41E+01	ESL EPA Region 5 (2003)
p-Nitroaniline	100-01-6	--		--		--		--		21.9	ESL EPA Region 5 (2003)	2.19E+01	ESL EPA Region 5 (2003)
2-Nitroaniline	88-74-4	--		--		--		--		74.1	ESL EPA Region 5 (2003)	7.41E+01	ESL EPA Region 5 (2003)
3-Nitroaniline	99-09-2	--		--		--		--		3.16	ESL EPA Region 5 (2003)	3.16E+00	ESL EPA Region 5 (2003)
4-Nitroaniline	100-01-6	--		--		--		--		21.9	ESL EPA Region 5 (2003)	2.19E+01	ESL EPA Region 5 (2003)
Nitrobenzene	99-95-3	40	PRGs	40	LOEC	1000	LOEC	8	No Soil, only Solution, LOEC	1.31	ESL EPA Region 5 (2003)	4.00E+01	PRGs
Nitrocellulose	9004-70-0	--		--		--		--		--		No ESV	No Source
Nitroglycerin	55-63-0	--		--		--		--		--		No ESV	No Source
Nitroguanidine		--		--		--		--		--		No ESV	No Source
o-Nitrophenol	88-75-5	--		--		--		--		1.6	ESL EPA Region 5 (2003)	1.60E+00	ESL EPA Region 5 (2003)
p-Nitrophenol	100-02-7	--		--		--		--		5.12	ESL EPA Region 5 (2003)	5.12E+00	ESL EPA Region 5 (2003)
2-Nitrophenol	88-75-5	--		--		--		--		1.6	ESL EPA Region 5 (2003)	1.60E+00	ESL EPA Region 5 (2003)
4-Nitrophenol	100-02-7	--		--		--		--		5.12	ESL EPA Region 5 (2003)	5.12E+00	ESL EPA Region 5 (2003)
4-Nitroquinoline-1-oxide	56-57-5	--		--		--		--		0.122	ESL EPA Region 5 (2003)	1.22E-01	ESL EPA Region 5 (2003)
3-Nitrotoluene	99-08-1	--		--		--		--		--		No ESV	No Source
N-Nitrosodiethylamine	55-18-5	--		--		--		--		0.0693	ESL EPA Region 5 (2003)	6.93E-02	ESL EPA Region 5 (2003)
N-Nitrosodimethylamine	62-75-9	--		--		--		--		3.2E-05	ESL EPA Region 5 (2003)	3.21E-05	ESL EPA Region 5 (2003)
N-Nitrosomethylamine	10595-95-6	--		--		--		--		0.00166	ESL EPA Region 5 (2003)	1.66E-03	ESL EPA Region 5 (2003)
N-Nitrosomorpholine	59-89-2	--		--		--		--		0.0706	ESL EPA Region 5 (2003)	7.06E-02	ESL EPA Region 5 (2003)
N-Nitrosopiperidine	100-75-4	--		--		--		--		0.00665	ESL EPA Region 5 (2003)	6.65E-03	ESL EPA Region 5 (2003)
N-Nitrosopyrrolidine	930-55-2	--		--		--		--		0.0126	ESL EPA Region 5 (2003)	1.26E-02	ESL EPA Region 5 (2003)
N-nitroso-di-n-dipropylamine	621-64-7	--		--		--		--		--		No ESV	No Source
N-nitrosodiphenylamine	86-30-6	20	PRGs	20	LOEC	--		--		0.545	ESL EPA Region 5 (2003)	2.00E+01	PRGs
2-Nitrotoluene	88-72-2	--		--		--		--		--		No ESV	No Source
5-nitro-o-Toluidine	99-55-8	--		--		--		--		8.73	ESL EPA Region 5 (2003)	8.73E+00	ESL EPA Region 5 (2003)
2,2'-oxybis(1-Chloropropane)	108-60-1	--		--		--		--		--		No ESV	No Source

Table N-8. Soil Ecological Screening Values for Level II Screen for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Soil Screening Values											
		Efroymsen et al. (1997a) Preliminary Remediation Goals for Ecological Endpoints ^a		Screening Value for Earthworms and Soil Microorganisms (Efroymsen et al. 1997b) ^b				Soil Screening Values for Plants (Efroymsen et al. 1997c) ^c		Ecological Screening Level (ESL) ^d		Preferred Ecological Screening Value (ESV) ^e	
				Benchmarks for Earthworm		Benchmarks for Soil Microorganism							
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source (Soil) (Solution)	Number (mg/kg)	Source	Number (mg/kg)	Source
Parathion	56-38-2	--		--		--		--		3.40E-04	ESL EPA Region 5 (2003)	3.40E-04	ESL EPA Region 5 (2003)
PCDD-S		--		--		--		--		1.99E-07	ESL EPA Region 5 (2003)	1.99E-07	ESL EPA Region 5 (2003)
Pentachlorophenol	87-86-5	3	PRGs	6	NOEC	400	LOEC	3	Soil, LOEC	0.119	ESL EPA Region 5 (2003)	3.00E+00	PRGs
Pentachloroaniline	527-20-8	100	PRGs	100	LOEC	--		--		--		1.00E+02	PRGs
Pentachlorobenzene	608-93-5	20	PRGs	20	LOEC	--		--		0.497	ESL EPA Region 5 (2003)	2.00E+01	PRGs
Pentachloroethane	76-01-7	--		--		--		--		10.7	ESL EPA Region 5 (2003)	1.07E+01	ESL EPA Region 5 (2003)
Pentachloronitrobenzene	82-68-8	--		--		--		--		7.09	ESL EPA Region 5 (2003)	7.09E+00	ESL EPA Region 5 (2003)
Phenacetin	62-44-2	--		--		--		--		11.7	ESL EPA Region 5 (2003)	1.17E+01	ESL EPA Region 5 (2003)
Phenanthrene	85-01-8	--		--		--		--		45.7	ESL EPA Region 5 (2003)	4.57E+01	ESL EPA Region 5 (2003)
Phenol	108-95-2	30	PRGs	30	LOEC	100	LOEC	70	Soil, LOEC	120	ESL EPA Region 5 (2003)	3.00E+01	PRGs
p-Phenylenediamine	106-50-3	--		--		--		--		6.16	ESL EPA Region 5 (2003)	6.16E+00	ESL EPA Region 5 (2003)
phorate	298-02-2	--		--		--		--		4.96E-04	ESL EPA Region 5 (2003)	4.96E-04	ESL EPA Region 5 (2003)
2-Picoline	109-06-8	--		--		--		--		9.9	ESL EPA Region 5 (2003)	9.90E+00	ESL EPA Region 5 (2003)
Polynuclear aromatic hydrocarbons		--		--		--		--		--		No ESV	No Source
Polychlorinated biphenyls	1336-36-3	0.371	PRGs	--		--		40	Soil, NOEC	3.32E-04	ESL EPA Region 5 (2003)	3.71E-01	PRGs
Polychlorinated dibenzofurans	51207-31-9	--		--		--		--		3.86E-05	ESL EPA Region 5 (2003)	3.86E-05	ESL EPA Region 5 (2003)
Pronamide	23950-58-5	--		--		--		--		0.0136	ESL EPA Region 5 (2003)	1.36E-02	ESL EPA Region 5 (2003)
Propionitrile	107-12-0	--		--		--		--		0.0498	ESL EPA Region 5 (2003)	4.98E-02	ESL EPA Region 5 (2003)
4-Nitrotoluene	99-99-0	--		--		--		--		--		No ESV	No Source
Pyrene	129-00-0	--		--		--		--		78.5	ESL EPA Region 5 (2003)	7.85E+01	ESL EPA Region 5 (2003)
Pryidine	110-86-1	--		--		--		--		1.03	ESL EPA Region 5 (2003)	1.03E+00	ESL EPA Region 5 (2003)
RDX (cyclonite) Hexahydro-1,3,5-trinitro-1,3,5-triazine	121-82-4	--		--		--		--		--		No ESV	No Source
Safrole	94-59-7	--		--		--		--		0.404	ESL EPA Region 5 (2003)	4.04E-01	ESL EPA Region 5 (2003)
2,4,5-TP (Silvex)	93-72-1	--		--		--		--		0.109	ESL EPA Region 5 (2003)	1.09E-01	ESL EPA Region 5 (2003)
Styrene	100-42-5	300	PRGs	--		--		300	Soil	4.69	ESL EPA Region 5 (2003)	3.00E+02	PRGs
TCDD	1746-1-6	3.15E-06	PRGs							1.99E-08	ESL EPA Region 5 (2003)	3.15E-06	PRGs
TCDF		8.40E-04	PRGs							--		8.40E-04	PRGs
2,3,5,6-Tetrachloroaniline	3481-20-7	20	PRGs	20	LOEC	--		20	Soil, LOEC	--		2.00E+01	PRGs
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	--		--		--		--		1.99E-07	ESL EPA Region 5 (2003)	1.99E-07	ESL EPA Region 5 (2003)
1,2,4,5-Tetrachlorobenzene	95-94-3	--		--		--		--		2.02	ESL EPA Region 5 (2003)	2.02E+00	ESL EPA Region 5 (2003)
1,2,3,4-Tetrachlorobenzene	634-66-2	10	PRGs	10	LOEC	--		--		--		1.00E+01	PRGs
Tetrachloroethene	127-18-4	--		--		--		10	No Soil, only Solution	9.92	ESL EPA Region 5 (2003)	1.00E+01	No Soil, only Solution
Tetrachloroethylene	127-18-4	--		--		--		--		9.92	ESL EPA Region 5 (2003)	9.92E+00	ESL EPA Region 5 (2003)
1,1,1,2-Tetrachloroethane	630-20-6	--		--		--		--		225	ESL EPA Region 5 (2003)	2.25E+02	ESL EPA Region 5 (2003)
1,1,2,2-Tetrachloroethane	79-34-5	--		--		--		--		0.127	ESL EPA Region 5 (2003)	1.27E-01	ESL EPA Region 5 (2003)
Tetrachloromethane	56-23-5	--		--		--		--		--		No ESV	No Source
2,3,4,5-Tetrachlorophenol	4901-51-3	20	PRGs	20	LOEC	--		--		--		2.00E+01	PRGs
2,3,4,6-Tetrachlorophenol	58-90-2	--		--		--		--		0.199	ESL EPA Region 5 (2003)	1.99E-01	ESL EPA Region 5 (2003)
Tetraethyl dithiopyrophosphate	3689-24-5	--		--		--		--		0.596	ESL EPA Region 5 (2003)	5.96E-01	ESL EPA Region 5 (2003)
Tetryl	479-45-8	--		--		--		--		--		No ESV	No Source
Toluene	108-88-3	200	PRGs	--		--		200	Soil, NOEC	5.45	ESL EPA Region 5 (2003)	2.00E+02	PRGs

Table N-8. Soil Ecological Screening Values for Level II Screen for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Soil Screening Values											
		Efroymsen et al. (1997a) Preliminary Remediation Goals for Ecological Endpoints ^a		Screening Value for Earthworms and Soil Microorganisms (Efroymsen et al. 1997b) ^b				Soil Screening Values for Plants (Efroymsen et al. 1997c) ^c		Ecological Screening Level (ESL) ^d		Preferred Ecological Screening Value (ESV) ^e	
				Benchmarks for Earthworm		Benchmarks for Soil Microorganism							
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source
o-Toluidine	95-53-4	--		--		--		--		2.97	ESL EPA Region 5 (2003)	2.97E+00	ESL EPA Region 5 (2003)
4-Toluidine	106-49-0	--		--		--		100	No Soil, only Solution, LOEC	--		1.00E+02	No Soil, only Solution, LOEC
Toxaphene	8001-35-2	--		--		--		--		0.119	ESL EPA Region 5 (2003)	1.19E-01	ESL EPA Region 5 (2003)
Tribromomethane	75-25-2	--		--		--		--		--		No ESV	No Source
2,4,5-Trichloroaniline	636-30-6	20	PRGs	20	LOEC	--		20	Soil, LOEC	--		2.00E+01	PRGs
Trichloroethene	79-01-6	--		--		--		100	No Soil, only Solution	12.4	ESL EPA Region 5 (2003)	1.00E+02	No Soil, only Solution
1,2,3-Trichlorobenzene	87-61-6	20	PRGs	20	LOEC	--		--		--		2.00E+01	PRGs
1,2,4-Trichlorobenzene	120-82-1	20	PRGs	20	LOEC	--		--		11.1	ESL EPA Region 5 (2003)	2.00E+01	PRGs
1,1,1-Trichloroethane	71-55-6	--		--		--		--		29.8	ESL EPA Region 5 (2003)	2.98E+01	ESL EPA Region 5 (2003)
1,1,2-Trichloroethane	79-00-5	--		--		--		--		28.6	ESL EPA Region 5 (2003)	2.86E+01	ESL EPA Region 5 (2003)
Trichloroethylene	79-01-6	--		--		--		--		12.4	ESL EPA Region 5 (2003)	1.24E+01	ESL EPA Region 5 (2003)
Trichlorofluoromethane	75-69-4	--		--		--		--		16.4	ESL EPA Region 5 (2003)	1.64E+01	ESL EPA Region 5 (2003)
2,4,5-Trichlorophenol	95-95-4	9	PRGs	9	LOEC	--		4	Soil, LOEC	14.1	ESL EPA Region 5 (2003)	9.00E+00	PRGs
2,4,6-Trichlorophenol	88-06-2	4	PRGs	10	LOEC	--		10	No Soil, only Solution, LOEC	9.94	ESL EPA Region 5 (2003)	4.00E+00	PRGs
1,2,3-Trichloropropane	96-18-4	--		--		--		--		3.36	ESL EPA Region 5 (2003)	3.36E+00	ESL EPA Region 5 (2003)
2,4,5-Trichlorophenoxyacetic acid	93-76-5	--		--		--		--		0.596	ESL EPA Region 5 (2003)	5.96E-01	ESL EPA Region 5 (2003)
1,3,5-Trinitrobenzene	99-35-4	--		--		--		--		0.376	ESL EPA Region 5 (2003)	8.60E-01	PPL (SAIC 2002)
2,4,6-Trinitrotoluene	118-96-7	--		--		--		--		--		7.10E+01	PPL (SAIC 2002)
Vinyl acetate	108-05-4	--		--		--		--		12.7	ESL EPA Region 5 (2003)	1.27E+01	ESL EPA Region 5 (2003)
Vinyl Chloride	75-01-4	--		--		--		--		0.646	ESL EPA Region 5 (2003)	6.46E-01	ESL EPA Region 5 (2003)
Xylenes (total)	1330-20-7	--		--		--		100	No Soil, only Solution, LOEC	10	ESL EPA Region 5 (2003)	1.00E+02	No Soil, only Solution, LOEC

^aEfroymsen, R.A., G.W Suter, II, B.E. Sample, and D.S. Jones. (1997a). Preliminary Remediation Goals for Ecological Endpoints, ES/ER/TM-162/R2.

^bEfroymsen, R.A., M.E Will., and G.W Suter, 1997b Toxicological Benchmarks for Potential Contaminants of Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process, Martin Marietta Energy Systems, Inc., ES/ER/TM-126/R1, Oak Ridge National Laboratory, Oak Ridge, TN.

^cEfroymsen, R. A., M.E. Will, G.W. Suter, and A.C. Wooten, 1997c. Toxicological Benchmarks for Screening Contaminants of Concern for Effects on Terrestrial Plants: 1997 Revision, Lockheed Martin Energy Systems, Inc., ES/ER/TM-85/R3, Oak Ridge National Laboratory, Oak Ridge, TN.

^dEcological Screening Levels (ESL), U.S. EPA Region 5, Updated per website: <http://www.epa.gov/reg5rcra/ca/edql.htm>, August 2003.

^eThe Preferred Soil Value hierarchy is as follows: Efroymsen et al. (1997a), followed by Efroymsen et al. (1997b), followed by Efroymsen et al. (1997c), followed by ESLs. Note that plant protection levels (PPLs) (SAIC 2002) that were developed for Winklepeck Burning Grounds are used for copper, cyanide, 1,3,5-trinitrobenzene, and 2,4,6-trinitrotoluene.

Diss = Dissolved Analyte.

-- = No value.

BHC = Benzene hexachloride.

CAS = Chemical Abstracts Service.

DDD = Dichlorodiphenyldichloroethane.

DDE = Dichlorodiphenyldichloroethylene.

DDT = Dichlorodiphenyltrichloroethane.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

LOEC = Lowest observed effect concentration.

NA = Not applicable.

NOEC = No observed effect concentration.

PRG = Preliminary remediation goal.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

Table N-9. Derivation of Sediment Ecological Screening Values for Demolition Area 2

Chemicals of Interest	CAS Registry Number	Sediment Screening Values					
		Consensus-Based Sediment Quality Guidelines ^a		Ecological Screening Level (ESL) ^b		Preferred Ecological Screening Value (ESV) ^c	
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source
<i>Inorganics</i>							
<i>(Target Analyte List)</i>							
Aluminum	7429-90-5					No ESV	No Source
Antimony	7440-36-0					No ESV	No Source
Arsenic	7440-38-2	9.79	MacDonald et al. (2000)	9.79	ESL EPA Region 5 (2003)	9.79E+00	MacDonald et al. (2000)
Barium	7440-39-3					No ESV	No Source
Beryllium	7440-41-7					No ESV	No Source
Cadmium	7440-43-9	0.99	MacDonald et al. (2000)	0.99	ESL EPA Region 5 (2003)	9.90E-01	MacDonald et al. (2000)
Calcium	7440-70-2					No ESV	No Source
Chromium	7440-47-3	43.4	MacDonald et al. (2000)	43.4	ESL EPA Region 5 (2003)	4.34E+01	MacDonald et al. (2000)
Chromium, hexavalent	7440-47-3	43.4	MacDonald et al. (2000)	43.4	ESL EPA Region 5 (2003)	4.34E+01	MacDonald et al. (2000)
Cobalt	7440-48-4			50	ESL EPA Region 5 (2003)	5.00E+01	ESL EPA Region 5 (2003)
Copper	7440-50-8	31.6	MacDonald et al. (2000)	31.6	ESL EPA Region 5 (2003)	3.16E+01	MacDonald et al. (2000)
Cyanide	57-12-5			0.0001	ESL EPA Region 5 (2003)	1.00E-04	ESL EPA Region 5 (2003)
Iron	7439-89-6					No ESV	No Source
Lead	7439-92-1	35.8	MacDonald et al. (2000)	35.8	ESL EPA Region 5 (2003)	3.58E+01	MacDonald et al. (2000)
Magnesium	7439-95-4					No ESV	No Source
Manganese	7439-96-5					No ESV	No Source
Mercury	7439-97-6	0.18	MacDonald et al. (2000)	0.174	ESL EPA Region 5 (2003)	1.80E-01	MacDonald et al. (2000)
Nickel	7440-02-0	22.7	MacDonald et al. (2000)	22.7	ESL EPA Region 5 (2003)	2.27E+01	MacDonald et al. (2000)
Nitrate/Nitrite						No ESV	No Source
Potassium	7440-07-7					No ESV	No Source
Selenium	7782-49-2					No ESV	No Source
Silver	7440-22-4			0.5	ESL EPA Region 5 (2003)	5.00E-01	ESL EPA Region 5 (2003)
Sodium	7440-23-5					No ESV	No Source
Sulfide	18496-25-8					No ESV	No Source
Thallium	7440-28-0					No ESV	No Source
Vanadium	7440-62-2					No ESV	No Source
Zinc	7440-66-6	121	MacDonald et al. (2000)	121	ESL EPA Region 5 (2003)	1.21E+02	MacDonald et al. (2000)
<i>Organic Compounds</i>							
Acenaphthene	83-32-9			0.00671	ESL EPA Region 5 (2003)	6.71E-03	ESL EPA Region 5 (2003)
Acenaphthylene	208-96-8			0.00587	ESL EPA Region 5 (2003)	5.87E-03	ESL EPA Region 5 (2003)
Acetone	67-64-1			0.0099	ESL EPA Region 5 (2003)	9.90E-03	ESL EPA Region 5 (2003)
Aldrin	309-00-2			0.002	ESL EPA Region 5 (2003)	2.00E-03	ESL EPA Region 5 (2003)

Table N-9. Derivation of Sediment Ecological Screening Values for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Sediment Screening Values					
		Consensus-Based Sediment Quality Guidelines ^a		Ecological Screening Level (ESL) ^b		Preferred Ecological Screening Value (ESV) ^c	
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source
Anthracene	120-12-7	0.0572	MacDonald et al. (2000)	0.0572	ESL EPA Region 5 (2003)	5.72E-02	MacDonald et al. (2000)
Arochlor-1016	12674-11-2			5.98E-02	ESL EPA Region 5 (2003)	5.98E-02	ESL EPA Region 5 (2003)
Arochlor-1221	11104-28-2			5.98E-02	ESL EPA Region 5 (2003)	5.98E-02	ESL EPA Region 5 (2003)
Arochlor-1232	11141-16-5			5.98E-02	ESL EPA Region 5 (2003)	5.98E-02	ESL EPA Region 5 (2003)
Arochlor-1242	53469-21-9			5.98E-02	ESL EPA Region 5 (2003)	5.98E-02	ESL EPA Region 5 (2003)
Arochlor-1248	12672-29-6			5.98E-02	ESL EPA Region 5 (2003)	5.98E-02	ESL EPA Region 5 (2003)
PCB-1248	12672-29-6			5.98E-02	ESL EPA Region 5 (2003)	5.98E-02	ESL EPA Region 5 (2003)
PCB-1254	11097-69-1			5.98E-02	ESL EPA Region 5 (2003)	5.98E-02	ESL EPA Region 5 (2003)
Arochlor-1260	11096-82-5			5.98E-02	ESL EPA Region 5 (2003)	5.98E-02	ESL EPA Region 5 (2003)
Benzene	71-43-2			0.142	ESL EPA Region 5 (2003)	1.42E-01	ESL EPA Region 5 (2003)
Benzenemethanol						No ESV	No Source
Benzo(a)anthracene	56-55-3	0.108	MacDonald et al. (2000)	0.108	ESL EPA Region 5 (2003)	1.08E-01	MacDonald et al. (2000)
Benzo(a)pyrene	50-32-8	0.15	MacDonald et al. (2000)	0.15	ESL EPA Region 5 (2003)	1.50E-01	MacDonald et al. (2000)
Benzo(b)fluoranthene	205-99-2			10.4	ESL EPA Region 5 (2003)	1.04E+01	ESL EPA Region 5 (2003)
Benzo(g,h,i)perylene	191-24-2			0.17	ESL EPA Region 5 (2003)	1.70E-01	ESL EPA Region 5 (2003)
Benzo(k)fluoranthene	207-08-9			0.24	ESL EPA Region 5 (2003)	2.40E-01	ESL EPA Region 5 (2003)
Benzoic Acid						No ESV	No Source
BHC	608-73-1					No ESV	No Source
BHC, alpha	319-84-6			0.006	ESL EPA Region 5 (2003)	6.00E-03	ESL EPA Region 5 (2003)
beta-BHC	319-85-7			0.005	ESL EPA Region 5 (2003)	5.00E-03	ESL EPA Region 5 (2003)
Biphenyl	92-52-4				No Source	No ESV	No Source
bis(2-chloroethoxy) methane	111-91-1				No Source	No ESV	No Source
bis(2-Chloroethyl) ether	111-44-4			3.52	ESL EPA Region 5 (2003)	3.52E+00	ESL EPA Region 5 (2003)
Bis(2-chloroisopropyl) ether	108-60-1				No Source	No ESV	No Source
bis(2-Ethylhexyl)phthalate	117-81-7			0.182	ESL EPA Region 5 (2003)	1.82E-01	ESL EPA Region 5 (2003)
Bromodichloromethane	74-97-5				No Source	No ESV	No Source
Bromochloromethane	74-97-5					No ESV	No Source
Bromoform	75-25-2			0.492	ESL EPA Region 5 (2003)	4.92E-01	ESL EPA Region 5 (2003)
Bromomethane	74-83-9				No Source	No ESV	No Source
4-bromophenyl-phenylether	101-55-3			1.55	ESL EPA Region 5 (2003)	1.55E+00	ESL EPA Region 5 (2003)
2-Butanone	78-93-3			0.0424	ESL EPA Region 5 (2003)	4.24E-02	ESL EPA Region 5 (2003)
Butylbenzylphthalate	85-68-7			1.97	ESL EPA Region 5 (2003)	1.97E+00	ESL EPA Region 5 (2003)
Carbazole	86-74-8					No ESV	No Source
Carbon Disulfide	75-15-0			0.0239	ESL EPA Region 5 (2003)	2.39E-02	ESL EPA Region 5 (2003)
Carbon Tetrachloride	56-23-5			1.45	ESL EPA Region 5 (2003)	1.45E+00	ESL EPA Region 5 (2003)
4-Chloroaniline	106-47-8			0.146	ESL EPA Region 5 (2003)	1.46E-01	ESL EPA Region 5 (2003)

Table N-9. Derivation of Sediment Ecological Screening Values for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Sediment Screening Values					
		Consensus-Based Sediment Quality Guidelines ^a		Ecological Screening Level (ESL) ^b		Preferred Ecological Screening Value (ESV) ^c	
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source
Chlorobenzene	108-90-7			0.291	ESL EPA Region 5 (2003)	2.91E-01	ESL EPA Region 5 (2003)
alpha-Chlordane	5103-71-9	0.00324	MacDonald et al. (2000)	0.00324	ESL EPA Region 5 (2003)	3.24E-03	MacDonald et al. (2000)
gamma-Chlordane	5103-74-2	0.00324	MacDonald et al. (2000)	0.00324	ESL EPA Region 5 (2003)	3.24E-03	MacDonald et al. (2000)
Chloroethane	75-00-3				No Source	No ESV	No Source
Chloroform	67-66-3			0.121	ESL EPA Region 5 (2003)	1.21E-01	ESL EPA Region 5 (2003)
Chloromethane	74-87-3				No Source	No ESV	No Source
2-Chloronaphthalene	91-58-7			0.417	ESL EPA Region 5 (2003)	4.17E-01	ESL EPA Region 5 (2003)
2-Chlorophenol	95-57-8			0.0319	ESL EPA Region 5 (2003)	3.19E-02	ESL EPA Region 5 (2003)
4-Chlorobenzenamine	106-47-8			0.146	ESL EPA Region 5 (2003)	1.46E-01	ESL EPA Region 5 (2003)
4-Chlorophenyl-phenyl ether	7005-72-3				No Source	No ESV	No Source
4-chloro-3-methylphenol	59-50-7				No Source	No ESV	No Source
Chrysene	218-01-9	0.166	MacDonald et al. (2000)	0.166	ESL EPA Region 5 (2003)	1.66E-01	MacDonald et al. (2000)
4,4'-DDD	72-54-8	0.00488	MacDonald et al. (2000)	0.00488	ESL EPA Region 5 (2003)	4.88E-03	MacDonald et al. (2000)
4,4'-DDE	72-55-9	0.00316	MacDonald et al. (2000)	0.00316	ESL EPA Region 5 (2003)	3.16E-03	MacDonald et al. (2000)
4,4'-DDT	50-29-3	0.00416	MacDonald et al. (2000)	0.00416	ESL EPA Region 5 (2003)	4.16E-03	MacDonald et al. (2000)
Diazinon	333-41-5					No ESV	No Source
Dibenzo(a,h)anthracene	53-70-3	0.033	MacDonald et al. (2000)	0.033	ESL EPA Region 5 (2003)	3.30E-02	MacDonald et al. (2000)
Dibenzofuran	132-64-9			0.449	ESL EPA Region 5 (2003)	4.49E-01	ESL EPA Region 5 (2003)
Dibromochloromethane	124-48-1				No Source	No ESV	No Source
1,2-Dibromoethane	106-93-4				No Source	No ESV	No Source
1,2-Dichlorobenzene	95-50-1			0.294	ESL EPA Region 5 (2003)	2.94E-01	ESL EPA Region 5 (2003)
1,3-Dichlorobenzene	541-73-1			1.315	ESL EPA Region 5 (2003)	1.32E+00	ESL EPA Region 5 (2003)
1,4-Dichlorobenzene	106-46-7			0.318	ESL EPA Region 5 (2003)	3.18E-01	ESL EPA Region 5 (2003)
3,3'-Dichlorobenzidine	91-94-1			0.127	ESL EPA Region 5 (2003)	1.27E-01	ESL EPA Region 5 (2003)
1,1-Dichloroethane	75-34-3			0.000575	ESL EPA Region 5 (2003)	5.75E-04	ESL EPA Region 5 (2003)
1,2-Dichloroethane	107-06-2			0.26	ESL EPA Region 5 (2003)	2.60E-01	ESL EPA Region 5 (2003)
1,1-Dichloroethene	75-35-4			0.0194	ESL EPA Region 5 (2003)	1.94E-02	ESL EPA Region 5 (2003)
1,2-Dichloroethene	540-59-0					No ESV	No Source
2,4-Dichlorophenol	120-83-2			0.0817	ESL EPA Region 5 (2003)	8.17E-02	ESL EPA Region 5 (2003)
1,2-Dichloropropane	78-87-5			0.333	ESL EPA Region 5 (2003)	3.33E-01	ESL EPA Region 5 (2003)
cis-1,3-Dichloropropene	10061-02-6				No Source	No ESV	No Source
trans-1,3-Dichloropropene	10061-02-6				No Source	No ESV	No Source
Dieldrin	60-57-1	0.0019	MacDonald et al. (2000)	0.0019	ESL EPA Region 5 (2003)	1.90E-03	MacDonald et al. (2000)
Diethylphthalate	84-66-2			0.295	ESL EPA Region 5 (2003)	2.95E-01	ESL EPA Region 5 (2003)
Dimethylbenzene	1330-20-7				No Source	No ESV	No Source
Dimethylphthalate	131-11-3				No Source	No ESV	No Source
2,4-Dimethylphenol	105-67-9			0.304	ESL EPA Region 5 (2003)	3.04E-01	ESL EPA Region 5 (2003)

Table N-9. Derivation of Sediment Ecological Screening Values for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Sediment Screening Values					
		Consensus-Based Sediment Quality Guidelines ^a		Ecological Screening Level (ESL) ^b		Preferred Ecological Screening Value (ESV) ^c	
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source
Di-n-butylphthalate	84-74-2			1.114	ESL EPA Region 5 (2003)	1.11E+00	ESL EPA Region 5 (2003)
Di-n-octylphthalate	117-84-0			40.6	ESL EPA Region 5 (2003)	4.06E+01	ESL EPA Region 5 (2003)
1,3-Dinitrobenzene	99-65-0			0.00861	ESL EPA Region 5 (2003)	8.61E-03	ESL EPA Region 5 (2003)
2,4-Dinitrophenol	51-28-5			0.00621	ESL EPA Region 5 (2003)	6.21E-03	ESL EPA Region 5 (2003)
2,4-Dinitrotoluene	121-14-2			0.0144	ESL EPA Region 5 (2003)	1.44E-02	ESL EPA Region 5 (2003)
2,6-Dinitrotoluene	606-20-2			0.0398	ESL EPA Region 5 (2003)	3.98E-02	ESL EPA Region 5 (2003)
2-Amino-4,6-Dinitrotoluene	35572-78-2					No ESV	No Source
4-Amino-2,6-Dinitrotoluene	19406-51-0					No ESV	No Source
2-Methyl-4,6-dinitrophenol	534-52-1				No Source	No ESV	No Source
4,6-Dinitro-2-methylphenol	534-52-1				No Source	No ESV	No Source
Endosulfan, alpha	959-98-8			0.0026	ESL EPA Region 5 (2003)	2.60E-03	ESL EPA Region 5 (2003)
Endosulfan, beta	33213-65-9			0.00194	ESL EPA Region 5 (2003)	1.94E-03	ESL EPA Region 5 (2003)
Endosulfan, mixed isomers	--					No ESV	No Source
Endosulfan sulfate	1031-07-8			0.0346	ESL EPA Region 5 (2003)	3.46E-02	ESL EPA Region 5 (2003)
Endrin	72-20-8	0.00222	MacDonald et al. (2000)	0.00222	ESL EPA Region 5 (2003)	2.22E-03	MacDonald et al. (2000)
Endrin aldehyde	7421-93-4			0.48	ESL EPA Region 5 (2003)	4.80E-01	ESL EPA Region 5 (2003)
Endrin ketone	53494-70-5					No ESV	No Source
Ethylbenzene	100-41-4			0.175	ESL EPA Region 5 (2003)	1.75E-01	ESL EPA Region 5 (2003)
Fluoranthene	206-44-0	0.423	MacDonald et al. (2000)	0.423	ESL EPA Region 5 (2003)	4.23E-01	MacDonald et al. (2000)
Fluorene	86-73-7	0.0774	MacDonald et al. (2000)	0.0774	ESL EPA Region 5 (2003)	7.74E-02	MacDonald et al. (2000)
gamma-BHC (lindane)	58-89-9	0.00237	MacDonald et al. (2000)	0.00237	ESL EPA Region 5 (2003)	2.37E-03	MacDonald et al. (2000)
Heptachlor	76-44-8			0.0006	ESL EPA Region 5 (2003)	6.00E-04	ESL EPA Region 5 (2003)
Heptachlor Epoxide	1024-57-3	0.00247	MacDonald et al. (2000)	0.00247	ESL EPA Region 5 (2003)	2.47E-03	MacDonald et al. (2000)
Hexachlorobenzene	118-74-1			0.02	ESL EPA Region 5 (2003)	2.00E-02	ESL EPA Region 5 (2003)
Hexachlorobutadiene	87-68-3			0.00265	ESL EPA Region 5 (2003)	2.65E-03	ESL EPA Region 5 (2003)
Hexachlorocyclopentadiene	77-47-4			0.901	ESL EPA Region 5 (2003)	9.01E-01	ESL EPA Region 5 (2003)
Hexachloroethane	67-72-1			0.584	ESL EPA Region 5 (2003)	5.84E-01	ESL EPA Region 5 (2003)
2-Hexanone	591-78-6			0.0582	ESL EPA Region 5 (2003)	5.82E-02	ESL EPA Region 5 (2003)
HMX Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	2691-41-0					No ESV	No Source
Indeno(1,2,3-cd)pyrene	193-39-5			0.2	ESL EPA Region 5 (2003)	2.00E-01	ESL EPA Region 5 (2003)
Isophorone	78-59-1			0.4232	ESL EPA Region 5 (2003)	4.23E-01	ESL EPA Region 5 (2003)
Malathion	121-75-5					No ESV	No Source
Methoxychlor	72-43-5			0.0136	ESL EPA Region 5 (2003)	1.36E-02	ESL EPA Region 5 (2003)
Methylene chloride	75-09-2			0.159	ESL EPA Region 5 (2003)	1.59E-01	ESL EPA Region 5 (2003)
Methyl chloride	74-87-3					No ESV	No Source
2-Methylnaphthalene	91-57-6			0.0202	ESL EPA Region 5 (2003)	2.02E-02	ESL EPA Region 5 (2003)

Table N-9. Derivation of Sediment Ecological Screening Values for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Sediment Screening Values					
		Consensus-Based Sediment Quality Guidelines ^a		Ecological Screening Level (ESL) ^b		Preferred Ecological Screening Value (ESV) ^c	
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source
2-Methylphenol	95-48-7				No Source	No ESV	No Source
4-Methylphenol	106-44-5				No Source	No ESV	No Source
4-Methyl-2-pentanone	108-10-1			0.0251	ESL EPA Region 5 (2003)	2.51E-02	ESL EPA Region 5 (2003)
Mirex	2385-85-5					No ESV	No Source
Naphthalene	91-20-3	0.176	MacDonald et al. (2000)	0.176	ESL EPA Region 5 (2003)	1.76E-01	MacDonald et al. (2000)
2-Nitroaniline	88-74-4				No Source	No ESV	No Source
3-Nitroaniline	99-09-2				No Source	No ESV	No Source
4-Nitroaniline	100-01-6				No Source	No ESV	No Source
2-Nitrobenzenamine	88-74-4				No Source	No ESV	No Source
3-Nitrobenzenamine	99-09-2				No Source	No ESV	No Source
Nitrobenzene	99-95-3			0.145	ESL EPA Region 5 (2003)	1.45E-01	ESL EPA Region 5 (2003)
4-Nitrobenzenamine	100-01-6				No Source	No ESV	No Source
Nitrocellulose	9004-70-0					No ESV	No Source
Nitroglycerin	55-63-0					No ESV	No Source
Nitroguanidine	--					No ESV	No Source
2-Nitrophenol	88-75-5				No Source	No ESV	No Source
4-Nitrophenol	100-02-7			0.0133	ESL EPA Region 5 (2003)	1.33E-02	ESL EPA Region 5 (2003)
m-Nitrotoluene	99-08-1					No ESV	No Source
N-nitroso-di-n-dipropylamine	621-64-7				No Source	No ESV	No Source
N-nitrosodiphenylamine	86-30-6				No Source	No ESV	No Source
N-Nitroso-di-n-propylamine	621-64-7				No Source	No ESV	No Source
o-Nitrotoluene	88-72-2					No ESV	No Source
2,2'-oxybis(1-Chloropropane)	108-60-1				No Source	No ESV	No Source
Pentachlorophenol	87-86-5			23	ESL EPA Region 5 (2003)	2.30E+01	ESL EPA Region 5 (2003)
Pentachlorobenzene	608-93-5			0.024	ESL EPA Region 5 (2003)	2.40E-02	ESL EPA Region 5 (2003)
Phenanthrene	85-01-8	0.204	MacDonald et al. (2000)	0.204	ESL EPA Region 5 (2003)	2.04E-01	MacDonald et al. (2000)
Phenol	108-95-2			0.0491	ESL EPA Region 5 (2003)	4.91E-02	ESL EPA Region 5 (2003)
Polynuclear aromatic hydrocarbons						No ESV	No Source
Polychlorinated biphenyls	1336-36-3			0.0598	ESL EPA Region 5 (2003)	5.98E-02	ESL EPA Region 5 (2003)
p-Nitrotoluene	99-99-0					No ESV	No Source
Pyrene	129-00-0	0.195	MacDonald et al. (2000)	0.195	ESL EPA Region 5 (2003)	1.95E-01	MacDonald et al. (2000)
RDX (cyclonite) Hexahydro-1,3,5-trinitro-1,3,5-triazine	121-82-4					No ESV	No Source
Styrene	100-42-5			0.254	ESL EPA Region 5 (2003)	2.54E-01	ESL EPA Region 5 (2003)
Tetrachloroethene	127-18-4			0.99	ESL EPA Region 5 (2003)	9.90E-01	ESL EPA Region 5 (2003)
Tetrachloroethylene	127-18-4			0.99	ESL EPA Region 5 (2003)	9.90E-01	ESL EPA Region 5 (2003)

Table N-9. Derivation of Sediment Ecological Screening Values for Demolition Area 2 (continued)

Chemicals of Interest	CAS Registry Number	Sediment Screening Values					
		Consensus-Based Sediment Quality Guidelines ^a		Ecological Screening Level (ESL) ^b		Preferred Ecological Screening Value (ESV) ^c	
		Number (mg/kg)	Source	Number (mg/kg)	Source	Number (mg/kg)	Source
1,1,2,2-Tetrachloroethane	79-34-5			0.85	ESL EPA Region 5 (2003)	8.50E-01	ESL EPA Region 5 (2003)
Tetrachloromethane	56-23-5			1.45	ESL EPA Region 5 (2003)	1.45E+00	ESL EPA Region 5 (2003)
Tetryl	479-45-8					No ESV	No Source
Toluene	108-88-3			1.22	ESL EPA Region 5 (2003)	1.22E+00	ESL EPA Region 5 (2003)
Total Organic Carbon						No ESV	No Source
Toxaphene	8001-35-2			7.70E-05	ESL EPA Region 5 (2003)	7.70E-05	ESL EPA Region 5 (2003)
Tribromomethane	75-25-2			0.492	ESL EPA Region 5 (2003)	4.92E-01	ESL EPA Region 5 (2003)
Trichloroethene	79-01-6			0.112	ESL EPA Region 5 (2003)	1.12E-01	ESL EPA Region 5 (2003)
1,2,4-Trichlorobenzene	120-82-1			5.062	ESL EPA Region 5 (2003)	5.06E+00	ESL EPA Region 5 (2003)
1,1,1-Trichloroethane	71-55-6			0.213	ESL EPA Region 5 (2003)	2.13E-01	ESL EPA Region 5 (2003)
1,1,2-Trichloroethane	79-00-5			0.518	ESL EPA Region 5 (2003)	5.18E-01	ESL EPA Region 5 (2003)
Trichloroethylene	79-01-6			0.112	ESL EPA Region 5 (2003)	1.12E-01	ESL EPA Region 5 (2003)
2,4,5-Trichlorophenol	95-95-4				No Source	No ESV	No Source
2,4,6-Trichlorophenol	88-06-2			0.208	ESL EPA Region 5 (2003)	2.08E-01	ESL EPA Region 5 (2003)
1,3,5-Trinitrobenzene	99-35-4				ESL EPA Region 5 (2003)	No ESV	ESL EPA Region 5 (2003)
2,4,6-Trinitrotoluene	118-96-7				No Source	No ESV	No Source
Vinyl chloride	75-01-4			0.202	ESL EPA Region 5 (2003)	2.02E-01	ESL EPA Region 5 (2003)
Xylenes (total)	1330-20-7			0.433	ESL EPA Region 5 (2003)	4.33E-01	ESL EPA Region 5 (2003)

^aD.D. MacDonald, C.G. Ingersoll, T.A. Berger. 2000. Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems.

^bEPA. 1998d. RCRA QAPP Instructions, USEPA Region 5, Chicago, IL, April 1998 revision. <http://www.epa.gov/reg5rcra/wptdiv/cars/cars.htm>.

^cThe Preferred Soil Value is MacDonald et al. (2000) value (first choice if it is available) else the EDQL.

^dPreferred ESV based on EDQL EPA Region 5 value for PCBs. BHC = Benzene hexachloride.

CAS = Chemical Abstracts Service.

DDD = Dichlorodiphenyldichloroethane.

DDE = Dichlorodiphenyldichloroethylene.

DDT = Dichlorodiphenyltrichloroethane.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

NA = Not applicable.

PRG = Preliminary remediation goal.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

**Table N-10. OAC Water Quality Criteria for Chemical Constituents
in Surface Water at Demolition Area 2**

Chemicals of Interest	CAS Registry Number	Surface Water	
		Ohio EPA OMZA (Outside Mixing Zone Average) ^a	
		Number (ug/L)	Source
<i>Inorganics</i>			
<i>(Target Analyte List)</i>			
Aluminum	7429-90-5	--	no source
Antimony	7440-36-0	190	Ohio Administrative Code
Arsenic	7440-38-2	150	Ohio Administrative Code
Arsenic III (Diss)	7440-38-2	150	Ohio Administrative Code
Arsenic (TR)	7440-38-2	150	Ohio Administrative Code
Arsenic V (Diss)	7440-38-2	--	No source
Barium	7440-39-3	220	Ohio Administrative Code
Cadmium ^b	7440-43-9	2.5	Ohio Administrative Code
Cadmium ^b (Diss)	7440-43-9	2.2	Ohio Administrative Code
Cadmium ^b (TR)	7440-43-9	2.5	Ohio Administrative Code
Calcium	7440-70-2	--	no source
Chromium ^b	7440-47-3	86	Ohio Administrative Code
Chromium ^b (diss)	7440-47-3	74	Ohio Administrative Code
Cobalt	7440-48-4	24	Ohio Administrative Code
Copper ^b	7440-50-8	9.3	Ohio Administrative Code
Copper ^b (Diss)	7440-50-8	9	Ohio Administrative Code
Copper ^b (TR)	7440-50-8	9.3	Ohio Administrative Code
Iron	7439-89-6	--	no source
Lead ^b (Diss)	7439-92-1	5.1	Ohio Administrative Code
Lead ^b	7439-92-1	6.4	Ohio Administrative Code
Magnesium	7439-95-4	--	no source
Manganese	7439-96-5	--	Ohio Administrative Code
Mercury	7439-97-6	0.91	Ohio Administrative Code
Mercury (CVAA) (Diss)	7439-97-6	0.77	Ohio Administrative Code
Mercury (TR)	7439-97-6	0.91	Ohio Administrative Code
Nickel ^b	7440-02-0	52	Ohio Administrative Code
Nickel ^b (Diss)	7440-02-0	52	Ohio Administrative Code
Nickel ^b (TR)	7440-02-1	52	Ohio Administrative Code
Nitrate/nitrite		--	no source
Potassium	7440-09-7	--	no source
Selenium (Diss)	7782-49-2	4.6	no source
Selenium	7782-49-2	5	no source
Sodium	7440-23-5	--	no source
Sulfide	18496-25-8	--	no source
Vanadium	7440-62-2	44	Ohio Administrative Code
Zinc ^b	7440-66-6	120	Ohio Administrative Code
Zinc ^b (Diss)	7440-66-6	120	Ohio Administrative Code
Zinc ^b (TR)	7440-66-6	120	Ohio Administrative Code
<i>Organic Compounds</i>			
Acetone	67-64-1	--	no source
bis(2-Ethylhexyl)phthalate	117-81-7	8.4	Ohio Administrative Code
2-Butanone	78-93-3	22000	Ohio Administrative Code
Carbon disulfide	75-15-0	15	Ohio Administrative Code

**Table N-10. OAC Water Quality Criteria for Chemical Constituents
in Surface Water at Demolition Area 2 (continued)**

Chemicals of Interest	CAS Registry Number	Surface Water	
		Ohio EPA OMZA (Outside Mixing Zone Average) ^a	
		Number (ug/L)	Source
Chloroform	67-66-3	140	Ohio Administrative Code
Chrysene	218-01-9		no source
2-Amino-4,6-dinitrotoluene	35572-78-2	18	Ohio Administrative Code
4-Amino-2,6-dinitrotoluene	19406-51-0	11	Ohio Administrative Code
4,4'-DDT	50-29-3	--	no source
4,4'-DDD	72-54-8	--	no source
1,3-Dinitrobenzene	99-65-0		no source
2,4-Dinitrotoluene	121-14-2	390	Ohio Administrative Code
2,6-Dinitrotoluene	606-20-2	730	Ohio Administrative Code
Fluoranthene	206-44-0	2.3	Ohio Administrative Code
Methylene chloride	75-09-2	1900	no source
Nitrocellulose	9004-70-0		no source
2-Nitrotoluene	88-72-2	71	Ohio Administrative Code
3-Nitrotoluene	99-08-1	42	Ohio Administrative Code
4-Nitrotoluene	99-99-0	46	Ohio Administrative Code
n-Nitrosodiphenylamine	86-30-6	--	no source
2,4,6-Trinitrotoluene	118-96-7	13	Ohio Administrative Code
HMX	2691-41-0	220	Ohio Administrative Code
Pyrene	129-00-0	42	Ohio Administrative Code
RDX	121-82-4	79	Ohio Administrative Code
Tetryl	479-45-8	ID	no source

^aOhio EPA, Division of Surface Water. 2002. Aquatic Life Tier I Criteria and Tier II Screening Values pursuant to OAC Chapters 3745-1 and 3745-2. December 30.

^bHardness adjusted to 100 mg/L CaCO₃.

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine.

ID = Insufficient data available to calculate criterion.

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine.

-- = No value.

Table N-11. Demolition Area 2 Media Screening Table for Surface Soil at Ravenna, Ohio

COPECs from Data and Media Evaluation	CAS Registry Number	Surface Soil Maximum Concentrations (mg/kg)	Preferred Ecological Screening Value (mg/kg)	Reference	Is Maximum Above or Below the Preferred Ecological Screening Value?	PBT Compound? ^a	COPEC Retained ^b ?
<i>Inorganics</i>							
Aluminum	7429-90-5	2.34E+04	6.00E+02	LOEC	above	no	yes
Arsenic	7440-38-2	1.99E+01	9.90E+00	PRGs	above	no	yes
Barium	7440-39-3	1.75E+02	2.83E+02	PRGs	below	no	no
Beryllium	7440-41-7	1.50E+00	1.00E+01	PRGs	below	no	no
Cadmium	7440-43-9	9.50E+00	4.00E+00	PRGs	above	yes	yes
Calcium	7440-70-2	3.41E+04	No ESV	No Source	no screening value	no	yes
Chromium	7440-47-3	6.08E+01	4.00E-01	PRGs	above	no	yes
Chromium, hexavalent	18540-29-9	2.80E+01	4.00E-01	PRGs	above	no	yes
Cobalt	7440-48-4	2.46E+01	2.00E+01	PRGs	above	no	yes
Copper	7440-50-8	1.21E+03	1.39E+01	PPL (SAIC 2002)	above	no	yes
Iron	7439-89-6	3.93E+04	2.00E+02	NOEC	above	no	yes
Lead	7439-92-1	2.18E+02	4.05E+01	PRGs	above	yes	yes
Magnesium	7439-95-4	5.34E+03	No ESV	No Source	no screening value	no	yes
Manganese	7439-96-5	2.14E+03	1.00E+02	LOEC	above	no	yes
Mercury	7487-94-6	9.90E+00	5.10E-04	PRGs	above	yes	yes
Nickel	7440-02-0	3.12E+01	3.00E+01	PRGs	above	no	yes
Nitrate/Nitrite		5.10E+00	No ESV	No Source	no screening value	no	yes
Potassium	7440-09-7	2.51E+03	No ESV	No Source	no screening value	no	yes
Selenium	7782-49-2	1.90E+00	2.10E-01	PRGs	above	no	yes
Sodium	7440-23-5	2.23E+02	No ESV	No Source	no screening value	no	yes
Sulfide	18496-25-8	2.20E+03	3.58E-03	ESL EPA Region 5 (2003)	above	no	yes
Vanadium	7440-62-2	3.80E+01	2.00E+00	PRGs	above	no	yes
Zinc	7440-66-6	5.57E+02	8.50E+00	PRGs	above	yes	yes
<i>Organics-Explosives</i>							
Tetryl	479-45-8	1.80E+01	No ESV	No Source	no screening value	No Kow	yes
2,4,6-Trinitrotoluene	121-14-2	3.20E+00	7.10E+01	PPL (SAIC 2002)	below	no	no
<i>Organics-Pesticide/PCB</i>							
4,4'-DDD	72-54-8	2.60E-02	7.58E-01	ESL EPA Region 5 (2003)	below	yes	yes

Table N-11. Demolition Area 2 Media Screening Table for Surface Soil at Ravenna, Ohio (continued)

COPECs from Data and Media Evaluation	CAS Registry Number	Surface Soil Maximum Concentrations (mg/kg)	Preferred Ecological Screening Value (mg/kg)	Reference	Is Maximum Above or Below the Preferred Ecological Screening Value?	PBT Compound? ^a	COPEC Retained ^b ?
<i>Organics-Semivolatiles</i>							
Bis(2-ethylhexyl)phthalate	117-81-7	1.00E-01	9.26E-01	ESL EPA Region 5 (2003)	below	yes	yes
Di-n-butylphthalate	84-74-2	8.60E-01	2.00E+02	PRGs	below	yes	yes
n-Nitrosodiphenylamine	86-30-6	1.00E-01	2.00E+01	PRGs	below	yes	yes
<i>Organics-Volatiles</i>							
Acetone	67-64-1	1.90E-02	2.50E+00	ESL EPA Region 5 (2003)	below	no	no
2-Butanone	78-93-3	8.90E-03	8.96E+01	ESL EPA Region 5 (2003)	below	no	no
Tetrachloroethene	127-48-4	4.80E-03	1.00E+01	No Soil, only Solution	below	no	no

^aYes = Cadmium, mercury, lead, and zinc are inorganic PBTs; or log K_{ow} is 3 or greater for organics; else, no.

^bYes = Maximum detect > preferred ecological screening value or no ecological screening value, and/or PBT compound;

no = Maximum detect < preferred ecological screening value.

CAS = Chemical Abstract Service.

COPEC = Constituent of potential ecological concern.

EDQL = Ecological data quality level.

EPA = Environmental Protection Agency.

ESV = Preferred Ecological Screening Value.

K_{ow} = Octanol-water partition coefficient.

LOEC = Lowest observed effect concentration.

NOEC = No observed effect concentration.

PBT = Persistent, bioaccumulative, and toxic pollutants.

PPL = Plant protection level.

PRG = Preliminary remediation goal.

Table N-12. Demolition Area 2 Media Screening Table for Subsurface Soil

COPECs from Data and Media Evaluation	CAS Registry Number	Surface Soil Maximum Concentrations (mg/kg)	Preferred Ecological Screening Value (mg/kg)	Reference	Is Maximum Above or Below the Preferred Ecological Screening Value?	PBT Compound? ^a	COPEC Retained ^b ?
<i>Inorganics</i>							
Arsenic	7440-38-2	3.26E+01	9.90E+00	PRGs	above	no	yes
Barium	7440-39-3	7.00E+02	2.83E+02	PRGs	above	no	yes
Cadmium	7440-43-9	4.70E+00	4.00E+00	PRGs	above	yes	yes
Chromium, hexavalent	18540-29-9	2.30E+01	4.00E-01	PRGs	above	no	yes
Copper	7440-50-8	4.45E+02	1.39E+01	PPL (SAIC 2002)	above	no	yes
Iron	7439-89-6	4.58E+04	2.00E+02	NOEC	above	no	yes
Lead	7439-92-1	1.47E+02	4.05E+01	PRGs	above	yes	yes
Magnesium	7439-95-4	1.10E+04	No ESV	No Source	no screening value	no	yes
Mercury	7487-94-6	1.81E+01	5.10E-04	PRGs	above	yes	yes
Nitrate/Nitrite		3.70E+00	No ESV	No Source	no screening value	no	yes
Selenium	7782-49-2	1.70E+00	2.10E-01	PRGs	above	no	yes
Sulfide	18496-25-8	1.90E+03	3.58E-03	ESL EPA Region 5 (2003)	above	no	yes
Zinc	7440-66-6	2.77E+03	8.50E+00	PRGs	above	yes	yes
<i>Organics-Explosives</i>							
2-Amino-4,6-Dinitrotoluene	35572-78-2	5.70E-01	No ESV	No Source	no screening value	no	yes
4-Amino-2,6-Dinitrotoluene	19406-51-0	4.30E-01	No ESV	No Source	no screening value	No Kow	yes
Tetryl	479-45-8	2.20E+01	No ESV	No Source	no screening value	No Kow	yes
2,4,6-Trinitrotoluene	121-14-2	1.30E+00	7.10E+01	PPL (SAIC 2002)	below	no	no
<i>Organics-Semivolatiles</i>							
Bis(2-ethylhexyl)phthalate	117-81-7	1.30E-01	9.26E-01	ESL EPA Region 5 (2003)	below	yes	yes
Di-n-butylphthalate	84-74-2	3.40E-01	2.00E+02	PRGs	below	yes	yes

Table N-12. Demolition Area 2 Media Screening Table for Subsurface Soil (continued)

COPECs from Data and Media Evaluation	CAS Registry Number	Surface Soil Maximum Concentrations (mg/kg)	Preferred Ecological Screening Value (mg/kg)	Reference	Is Maximum Above or Below the Preferred Ecological Screening Value?	PBT Compound? ^a	COPEC Retained ^b ?
<i>Organics-Volatiles</i>							
2-Butanone	78-93-3	1.20E-02	8.96E+01	ESL EPA Region 5 (2003)	below	no	no
Tetrachloroethene	127-48-4	2.40E-03	1.00E+01	No Soil, only Solution	below	no	no
Toluene	108-88-3	7.00E-03	2.00E+02	PRGs	below	no	no

^aYes = Cadmium, mercury, lead, and zinc are inorganic PBTs; or log K_{ow} is 3 or greater for organics; else, no.

^bYes = Maximum detect > preferred ecological screening value or no ecological screening value, and/or PBT compound;.

no = Maximum detect < preferred ecological screening value.

CAS = Chemical Abstract Service.

COPEC = Constituent of potential ecological concern.

EDQL = Ecological data quality level.

EPA = Environmental Protection Agency; ESV = Preferred Ecological Screening Value.

K_{ow} = Octanol-water partition coefficient.

LOEC = Lowest observed effect concentration.

NOEC = No observed effect concentration.

PBT = Persistent, bioaccumulative, and toxic pollutants.

PPL = Plant protection level.

PRG = Preliminary remediation goal.

Table N-13. Demolition Area 2 Media Screening Table for Sand Creek Downstream Sediment

COPECs from Data and Media Evaluation	CAS Registry Number	Surface Soil Maximum Concentrations (mg/kg)	Preferred Ecological Screening Value (mg/kg)	Reference	Is Maximum Above or Below the Preferred Ecological Screening Value?	PBT Compound? ^a	COPEC Retained ^b ?
<i>Inorganics</i>							
Cadmium	7440-43-9	1.10E+00	9.90E-01	MacDonald et al. (2000)	above	yes	yes
Chromium, hexavalent	18540-29-9	6.10E+00	4.34E+01	MacDonald et al. (2000)	below	no	no
Copper	7440-50-8	5.27E+01	3.16E+01	MacDonald et al. (2000)	above	no	yes
Lead	7439-92-1	3.08E+01	3.58E+01	MacDonald et al. (2000)	below	yes	yes
Mercury	7487-94-6	3.70E-01	1.80E-01	MacDonald et al. (2000)	above	yes	yes
Nickel	7440-02-0	1.99E+01	2.27E+01	MacDonald et al. (2000)	below	no	no
Nitrate/Nitrite		3.50E+00	No ESV	No Source	no screening value	no	yes
Sulfide	18496-25-8	1.10E+03	No ESV	No Source	no screening value	no	yes
Zinc	7440-66-6	1.24E+02	1.21E+02	MacDonald et al. (2000)	above	yes	yes
<i>Organics-Pesticides/PCBs</i>							
Dieldrin	60-57-1	6.40E-04	1.90E-03	MacDonald et al. (2000)	below	yes	yes
<i>Organics-Volatiles</i>							
2-Butanone	78-93-3	1.60E-02	4.24E-02	ESL EPA Region 5 (2003)	below	no	no
Chloromethane	74-87-3	4.00E-03	No ESV	No Source	no screening value	no	yes
Tetrachloroethene	127-48-4	3.80E-03	9.90E-01	ESL EPA Region 5 (2003)	below	no	no

^aYes = Cadmium, mercury, lead, and zinc are inorganic PBTs; or log Kow is 3 or greater for organics; else, no.

^bYes = Maximum detect > preferred ecological screening value or no ecological screening value, and/or PBT compound;
no = Maximum detect < preferred ecological screening value.

CAS = Chemical Abstract Service.

COPEC = Constituent of potential ecological concern.

EPA = Environmental Protection Agency.

ESL = Ecological screening level.

ESV = Preferred Ecological Screening Value.

PBT = Persistent, bioaccumulative, and toxic pollutants.

Table N-14. Demolition Area 2 Media Screening Table for Sand Creek Upstream Sediment

COPECs from Data and Media Evaluation	CAS Registry Number	Surface Soil Maximum Concentrations (mg/kg)	Preferred Ecological Screening Value (mg/kg)	Reference	Is Maximum Above or Below the Preferred Ecological Screening Value?	PBT Compound? ^a	COPEC Retained ^b ?
<i>Inorganics</i>							
Barium	7440-39-3	3.17E+02	No ESV	No Source	no screening value	no	yes
Cadmium	7440-43-9	2.30E+00	9.90E-01	MacDonald et al. (2000)	above	yes	yes
Copper	7440-50-8	6.07E+01	3.16E+01	MacDonald et al. (2000)	above	no	yes
Lead	7439-92-1	3.13E+01	3.58E+01	MacDonald et al. (2000)	below	yes	yes
Mercury	7487-94-6	1.20E-01	1.80E-01	MacDonald et al. (2000)	below	yes	yes
Nitrate/Nitrite		4.90E+00	No ESV	No Source	no screening value	no	yes
Sulfide	18496-25-8	7.60E+02	No ESV	No Source	no screening value	no	yes
Zinc	7440-66-6	1.60E+02	1.21E+02	MacDonald et al. (2000)	above	yes	yes
<i>Organics-Semivolatiles</i>							
Bis(2-ethylhexyl)phthalate	117-81-7	3.20E-02	1.82E-01	ESL EPA Region 5 (2003)	below	yes	yes
Di-n-butylphthalate	84-74-2	2.00E-01	1.11E+00	ESL EPA Region 5 (2003)	below	yes	yes
Fluoranthene	206-44-0	1.20E-01	4.23E-01	MacDonald et al. (2000)	below	yes	yes
<i>Organics-Volatiles</i>							
2-Butanone	78-93-3	7.90E-03	4.24E-02	ESL EPA Region 5 (2003)	below	no	no

^aYes = Cadmium, mercury, lead, and zinc are inorganic PBTs; or log Kow is 3 or greater for organics; else, no.

^bYes = Maximum detect > preferred ecological screening value or no ecological screening value, and/or PBT compound;

no = Maximum detect < preferred ecological screening value.

CAS = Chemical Abstract Service.

COPEC = Constituent of potential ecological concern.

EPA = Environmental Protection Agency.

ESL = Ecological screening level.

ESV = Preferred Ecological Screening Value.

PBT = Persistent, bioaccumulative, and toxic pollutants.

Table N-15. Demolition Area 2 Media Screening Table for Sand Creek Downstream Surface Water

Inputted COPECs from Data Evaluation Screen	CAS Registry Number	Surface Water Average Concentrations (µg/L)	OAC WQC (µg/L)	Reference	Is Maximum Above or Below the OAC WQC?	PBT Compound? ^a	COPEC Retained ^b ?
<i>Inorganics</i>							
Calcium	7440-70-2	4.73E+04	No WQC	no source	no screening value	no	yes
Magnesium	7439-95-4	1.19E+04	No WQC	no source	no screening value	no	yes
Nitrate/Nitrite		5.00E+01	No WQC	no source	no screening value	no	yes
Sulfide	18496-25-8	1.15E+03	No WQC	no source	no screening value	no	yes
Zinc	7440-66-6	6.39E+00	1.20E+02	Ohio Administrative Code	below	yes	yes
<i>Organics-Explosives</i>							
Nitrocellulose	9004-70-0	1.49E+02	No WQC	no source	no screening value	No Kow	yes
<i>Organics-Semivolatiles</i>							
Bis(2-ethylhexyl)phthalate	117-81-7	5.16E+00	8.40E+00	Ohio Administrative Code	below	yes	yes
<i>Organics-Volatiles</i>							
Carbon Disulfide	75-15-0	7.45E-01	1.50E+01	Ohio Administrative Code	below	no	no
Chloroform	67-66-3	8.88E-01	1.40E+02	Ohio Administrative Code	below	no	no

^aYes = Cadmium, mercury, lead, and zinc are inorganic PBTs; or log Kow is 3 or greater for organics; else, no.

^bYes = Maximum detect > WQC or no WQC, and/or PBT compound;

no = Maximum detect < WQC.

WQC for chromium and zinc are hardness-dependent and based on hardness of 100 mg/L as CaCO₃.

CAS = Chemical Abstract Service.

COPEC = Constituent of potential ecological concern.

K_{ow} = octanol-water partition coefficient

OAC = Ohio Administrative Code.

PBT = Persistent, bioaccumulative, and toxic pollutants (If PBT, analyte is retained even if concentration is below ESV).

WQC = Water quality criteria.

Table N-16. Demolition Area 2 Media Screening Table for Sand Creek Upstream Surface Water

Inputted COPECs from Data and Media Evaluation	CAS Registry Number	Surface Water Average Concentrations (µg/L)	OAC WQC (µg/L)	Reference	Is Maximum Above or Below the OAC WQC?	PBT Compound? ^a	COPEC Retained ^b ?
<i>Metals</i>							
Calcium	7440-70-2	4.40E+04	No WQC	no source	no screening value	no	yes
Chromium	7440-47-3	1.04E+01	8.60E+01	Ohio Administrative Code	below	no	no
Magnesium	7439-95-4	1.07E+04	No WQC	no source	no screening value	no	yes
Nickel	7440-02-0	4.20E+00	5.20E+01	Ohio Administrative Code	below	no	no
Nitrate/Nitrite		1.25E+02	No WQC	no source	no screening value	no	yes
<i>Organics-Explosives</i>							
Nitrocellulose	9004-70-0	1.45E+02	No WQC	no source	no screening value	No Kow	yes
<i>Organics-Volatiles</i>							
Chloroform	67-66-3	8.50E-01	1.40E+02	Ohio Administrative Code	below	no	no

^aYes = Cadmium, mercury, lead, and zinc are inorganic PBTs; or log Kow is 3 or greater for organics; else, no.

^bYes = Maximum detect > WQC or no WQC, and/or PBT compound;

no = Maximum detect < WQC.

WQC for chromium and nickel are hardness-dependent and based on hardness of 100 mg/L as CaCO₃.

CAS = Chemical Abstract Service.

COPEC = Constituent of potential ecological concern.

K_{ow} = Octanol-water partition coefficient.

OAC = Ohio Administrative Code.

PBT = Persistent, bioaccumulative, and toxic pollutants (If PBT, analyte is retained even if concentration is below ESV).

WQC = Water quality criteria.