

Table 4-2
Potential Preliminary Remediation Goals for Soil in the Landfill
Rolling Knolls Landfill Superfund Site - Feasibility Study
Chatham, New Jersey

Chemical Name	CAS Number	NJDEP Non-Residential Direct Contact Soil Remediation Standards (mg/kg)	ARS (mg/kg)	Federal Remediation Guideline - Residential (mg/kg)	Federal Remediation Guideline - Non- Residential (mg/kg)
1,1-Biphenyl	92-52-4	240			
1,1-dichloroethane	75-34-3	24			
1,2,4-trichlorobenzene	120-82-1	820			
1,2-dichlorobenzene	95-50-1	59000			
1,2-dichloroethane	107-06-2	3			
1,3-dichlorobenzene	541-73-1	59000			
1,4-dichlorobenzene	106-46-7	13			
2,4-dimethylphenol	105-67-9	14000			
2,4-dinitrophenol	51-28-5	1400			
2,4-Dinitrotoluene	121-14-2	3			
2-methylnaphthalene	91-57-6	2400			
2-methylphenol	95-48-7	3400			
4,4-DDD	72-54-8	13			
4,4-DDE	72-55-9	9			
4,4-DDT	50-29-3	8			
4-methylphenol	106-44-5	340			
a-BHC	319-84-6	0.5			
Acenaphthene	83-32-9	37000			
Acenaphthylene	208-96-8	300000			
Acetophenone	98-86-2	5	13		
Aldrin	309-00-2	0.2	0.7		
Anthracene	120-12-7	30000			
Antimony	7440-36-0	450	830		
Arsenic	7440-38-2	19	19		
Barium	7440-39-3	59000			
b-BHC	319-85-7	2			
Benzo(a)anthracene	56-55-3	17	87		
Benzaldehyde	100-52-7	68000			
Benzene	71-43-2	5			
Benzo(a)pyrene	50-32-8	2	9		
Benzo(b)fluoranthene	205-99-2	17	87		
Benzo(g,h,i)perylene	191-24-2	30000			
Benzo(k)fluoranthene	207-08-9	170			

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Beryllium	7440-41-7	140			
Bis(2-chloroethyl)ether	111-44-4	2			
Bis(2-ethylhexyl)phthalate	117-81-7	140	670		
Butyl benzyl phthalate	85-68-7	14000			
Cadmium	7440-43-9	78			
Caprolactam	105-60-2	340000			
Carbazole	86-74-8	96			
Carbon disulfide	75-15-0	110000			
Carbon tetrachloride	56-23-5	4	24		
Chlordane (cis)	5103-71-9	1	5		
Chlordane (trans)	5103-74-2	1	5		
Chlorobenzene	108-90-7	7400			
Chlorodibromomethane	124-48-1	8			
Chloroform	67-66-3	2	10		
Chrysene	218-01-9	1700			
cis-1,2-dichloroethene	156-59-2	560			
Cobalt	7440-48-4	590			
Copper	7440-50-8	45000	83000		
Cyanide Total	57-12-5	680			
Dibenz(a,h)anthracene	53-70-3	2	9		
Dichlorodifluoromethane	75-71-8	230000			
Dichloromethane	75-09-2	230			
Dieldrin	60-57-1	0.2	0.8		
Diethylphthalate	84-66-2	550000			
Di-n-butyl phthalate	84-74-2	68000			
Di-n-octyl phthalate	117-84-0	27000			
Endosulfan I	959-98-8	6800			
Endosulfan I and II	115-29-7	6800			
Endosulfan II	33213-65-9	6800			
Endosulfan sulfate	1031-07-8	6800			
Endrin	72-20-8	340			
Ethylbenzene	100-41-4	110000			

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Fluoranthene	206-44-0	24000			
Fluorene	86-73-7	24000			
g-BHC (Lindane)	58-89-9	2			
Heptachlor	76-44-8	0.7	3		
Heptachlor epoxide	1024-57-3	0.3			
Hexachlorobenzene	118-74-1	1			
Indeno(1,2,3-c,d)pyrene	193-39-5	17			
Isophorone	78-59-1	2000			
Lead	7439-92-1	800	2700	200	800
Manganese	7439-96-5	5900	16000		
Mercury	7439-97-6	65	180		
Methoxychlor	72-43-5	5700			
Methyl Ethyl Ketone	78-93-3	44000			
MTBE	1634-04-4	320			
Naphthalene	91-20-3	17			
Nickel	7440-02-0	23000			
n-Nitrosodiphenylamine	86-30-6	390			
o,p-DDD	53-19-0	13			
o,p'-DDE	3424-82-6	9			
PCBs (Sum of total)	1336-36-3	1	5*		
Pentachlorophenol	87-86-5	3			
Phenanthrene	85-01-8	300000			
Phenol	108-95-2	210000			
Pyrene	129-00-0	18000			
Selenium	7782-49-2	5700			
Silver	7440-22-4	5700			
Styrene	100-42-5	260			
Tetrachloroethene	127-18-4	1500			
Toluene	108-88-3	91000			
Toxaphene	8001-35-2	3			
trans-1,2-dichloroethene	156-60-5	720			
trans-1,3-dichloropropene	542-75-6	7			

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Trichloroethene	79-01-6	10			
Trichlorofluoromethane	75-69-4	340000			
Vanadium	7440-62-2	1100	2100		
Vinyl chloride	75-01-4	2			
Xylene Total	1330-20-7	170000			
Zinc	7440-66-6	110000			

Notes:

* - The risk-based concentration (RBC) for PCBs is 10 mg/kg, however since the Alternate Remediation Standard is lower than the RBC, the ARS was selected as the PRG.

ARS - Alternate Remediation Standard

PRG - Preliminary Remediation Goal

CAS - Chemical Abstracts Service

NJDEP - New Jersey Department of Environmental Protection

mg/kg - milligrams per kilogram