

Chapter NR 507

APPENDIX II

SUBSTANCES FOR ASSESSMENT MONITORING¹
AT MUNICIPAL SOLID WASTE LANDFILLS

Common name ²	CAS RN ⁴	Synonyms
Acenaphthene	83-32-9	1,2-Dihydroacenaphthylene
Acenaphthylene	208-96-8	
Acetone	67-64-1	2-Propanone
Acetonitrile	75-05-8	Methyl cyanide
Acetophenone	98-86-2	1-Phenylethanone
2-Acetylaminofluorene	53-96-3	N-9H-fluoren-2-yl-Acetamide; 2-AAF
Acrolein	107-02-8	2-Propenal
Acrylonitrile	107-13-1	2-Propenenitrile
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro- c1 α ,4 α ,4a β ,5 α ,8 α -,8a β d-
Allyl chloride	107-05-1	3-Chloro-1-propene
4-Aminobiphenyl	92-67-1	[1,1[-Biphenyl]-4-amine
Anthracene	120-12-7	
Antimony	7440-36-0	
Arsenic	7440-38-2	
Barium	7440-39-3	
Benzene	71-43-2	
Benzo[a]anthracene	56-55-3	Benzanthracene
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene
Benzo[k]fluoranthene	207-08-9	
Benzo[ghi]perylene	191-24-2	
Benzo[a]pyrene	50-32-8	
Benzyl alcohol	100-51-6	Benzenemethanol
Beryllium	7440-41-7	
alpha-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6-hexachloro-,c1 α ,2 α ,3 β ,4 α ,5 β , 6 β d
beta-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6-hexachloro-,c1 α ,2 β ,3 α ,4 β ,5 α ,6 β d-
delta-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6-hexachloro-,c1 α ,2 α ,3 α ,4 β ,5 α ,6 β d-
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-,c1 α ,2 α ,3 β ,4 α ,5 α ,6 β d-
Bisc2-chloroethoxydmethane	111-91-1	Ethane, 1,1[-[methylenebisoxyd]bis-[2-chloro-
Bisc2-chloroethyldether	111-44-4	Ethane, 1,1[-oxybis[2-chloro-
Bisc2-chloro-1-methylethyl ether [see note 4]	108-60-1	2,2[-Dichlorodiisopropylether
Bisc2-ethylhexyl d phthalate	117-81-7	1,2-Benzenedicarboxylic acid, bisc2-ethylhexyldester
Bromochloromethane	74-97-5	Chlorobromomethane
Bromodichloromethane	75-27-4	Dichlorobromomethane
Bromoform	75-25-2	Tribromomethane
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-
Butyl benzyl phthalate	85-68-7	Benzyl butyl phthalate
Cadmium	7440-43-9	
Carbon disulfide	75-15-0	
Carbon tetrachloride	56-23-5	Tetrachloromethane

Common name ²	CAS RN ⁴	Synonyms
Chlordane [see note 5]	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8-octachloro-2,3,3a,4,7,7a- hexahydro
p-Chloroaniline	106-47-8	Benzenamine, 4-chloro-
Chlorobenzene	108-90-7	Monochlorobenzene
Chlorobenzilate	510-15-6	Benzenecetic acid, 4-chloro- α -c4-chlorophenyld- α -hydroxy-, ethyl ester
p-Chloro-m-cresol	59-50-7	Phenol, 4-chloro-3-methyl-
Chloroethane	75-00-3	Ethyl chloride
Chloroform	67-66-3	Trichloromethane
2-Chloronaphthalene	91-58-7	
2-Chlorophenol	95-57-8	
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-
Chromium	7440-47-3	
Chrysene	218-01-9	
Cobalt	7440-48-3	
Copper	7440-50-8	
m-Cresol	108-39-4	3-Methylphenol
o-Cresol	95-48-7	2-Methylphenol
p-Cresol	106-44-5	4-Methylphenol
Cyanide	57-12-5	
2,4-D; 2,4-Dichlorophenoxy-acetic acid	94-75-7	Acetic acid, c2,4-dichlorophenoxyd-
4,4[-DDD	72-54-8	Benzene 1,1[-c2,2-dichloroethylidenedbis[4-chloro-
4,4[-DDE	72-55-9	Benzene, 1,1[-cdichloroethylenidenedbis[4-chloro
4,4[-DDT	50-29-3	Benzene, 1,1[-c2,2,2-trichloroethylidenedbis[4-chloro
Diallate	2303-16-4	Carbamothioic acid, bisc1-methylethyl- , S- c2,3-dichloro-2-propenyld ester
Dibenzo[a,h]anthracene	53-70-3	Dibenz[a,h]anthracene
Dibenzofuran	132-64-9	
Dibromochloromethane	124-48-1	Chlorodibromomethane
1,2-Dibromo-3-chloropropane	96-12-8	DBCP
1,2-Dibromoethane	106-93-4	Ethylene dibromide, EDB
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
o-Dichlorobenzene	95-50-1	1,2-Dichlorobenzene
m-Dichlorobenzene	541-73-1	1,3-Dichlorobenzene
p-Dichlorobenzene	106-46-7	1,4-Dichlorobenzene
3,3[-Dichlorobenzidine	91-94-1	[1,1[-Biphenyl]-4,4[-diamine, 3,3[-dichloro-
trans-1,4-Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, cEd-
Dichlorodifluoromethane	75-71-8	Freon 12, CFC-12
1,1-Dichloroethane	75-34-3	Ethylidene chloride
1,2-Dichloroethane	107-06-2	Ethylene dichloride
1,1-Dichloroethylene	75-35-4	Vinylidene chloride; 1,1-Dichloroethene
cis-1,2-Dichloroethylene	156-59-2	cis-1,2-Dichloroethene
trans-1,2-Dichloroethylene	156-60-5	trans-1,2-Dichloroethene
2,4-Dichlorophenol	120-83-2	
2,6-Dichlorophenol	87-65-0	
1,2-Dichloropropane	78-87-5	Propylene dichloride
1,3-Dichloropropane	142-28-9	Trimethylene chloride
2,2-Dichloropropane	594-20-7	
1,1-Dichloropropene	563-58-6	1,1-dichloropropylene .
cis-1,3-Dichloropropene	10061-01-5	1,3-dichloropropylene, cZd

Common name ²	CAS RN ⁴	Synonyms
trans-1,3-Dichloropropene	10061-02-6	1,3-dichloropropylene, cEd
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, c1α,2β,2α,3β,6β,6α,7β,7αd-
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
O,O-Diethyl O-2-pyrazinyl phosphorothioate	297-97-2	Thionazin
Dimethoate	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-cmethylaminod-2-oxoethyl] ester
p-cDimethylaminodazobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-cphenylazod-
7,12-Dimethylbenz[a]anthracene	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
3,3[-Dimethylbenzidine	119-93-7	[1,1[-Biphenyl]-4,4[-diamine, 3,3[-dimethyl-
2,4-Dimethylphenol	105-67-9	2,4-Dimethylphenol
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
m-Dinitrobenzene	99-65-0	1,3-Dinitrobenzene
4,6-Dinitro-o-cresol	534-52-1	2-Methyl-4,6-dinitrophenol
2,4-Dinitrophenol	51-28-5	
2,4-Dinitrotoluene	121-14-2	1-Methyl-2,4-dinitrobenzene
2,6-Dinitrotoluene	606-20-2	2-Methyl-1,3-dinitrobenzene
Dinoseb	88-85-7	DNBP; 2-sec-Butyl-4,6-dinitrophenol
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
Diphenylamine	122-39-4	Benzenamine, N-phenyl-
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-cethylthioethyl]ester
Endosulfan I	959-98-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a hexahydro-, 3-oxide, c3α,5aβ,6α,9α,9aβd-
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro- 1,5,5a,6,9,9a-hexahydro-, 3-oxide, c3α,5α,6β,9β,9αd-
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro 1,5,5a,6,9,9a-hexahydro-, 3,3-dioxide
Endrin	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, c1α,2β,2αβ,3α,6α,6aβ,7β,7αd-
Endrin aldehyde	7421-93-4	1,2,4-Methenocyclopenta[cd]pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro-, c1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R*d-
Ethylbenzene	100-41-4	
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester
Famphur	52-85-7	Phosphorothioic acid, O-[4-[cdimethylaminodsulfonyl]phenyl]-O,O-dimethyl ester
Fluoranthene	206-44-0	
Fluorene	86-73-7	9H-Fluorene
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a,-hexahydro,c1α,1bβ,2α,5α,5aβ,6β,6αd
Hexachlorobenzene	118-74-1	
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
Hexachloroethane	67-72-1	
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
2-Hexanone	591-78-6	Methyl butyl ketone

Common name ²	CAS RN ⁴	Synonyms
Phenacetin	62-44-2	Acetamide, N-c4-ethoxyphenyl
Phenanthrene	85-01-8	
Phenol	108-95-2	
p-Phenylenediamine	106-50-3	1,4-Benzenediamine
Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[cethylthiomethyl] ester
Polychlorinated biphenyls	See Note 6	PCBs; 1,1[-Biphenyl, chloro derivatives, Arochlors
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N- c1,1-dimethyl-2-propynyl-
Propionitrile	107-12-0	Ethyl cyanide; Propanenitrile
Pyrene	129-00-0	
Pyridine	110-86-1	
Safrole	94-59-7	1,3-Benzodioxole, 5-c2-propenyl-
Selenium	7782-49-2	
Silver	7440-22-4	
Silvex	93-72-1	2,4,5-TP; Propanoic acid, 2-c2,4,5-trichlorophenoxyd-
Styrene	100-42-5	Ethenylbenzene
Sulfide	18496-25-8	
2,4,5-T	93-76-5	2,4,5-Trichloro-phenoxyacetic acid
1,2,4,5-Tetrachlorobenzene	95-94-3	
1,1,1,2-Tetrachloroethane	630-20-6	
1,1,2,2-Tetrachloroethane	79-34-5	
Tetrachloroethylene	127-18-4	Perchloroethylene; Tetrachloroethene; PCE
2,3,4,6-Tetrachlorophenol	58-90-2	
Tetrahydrofuran	109-99-9	THF
Thallium	7440-28-0	
Tin	7440-31-5	
Toluene	108-88-3	Methylbenzene
o-Toluidine	95-53-4	2-Methylbenzenamine
Toxaphene	See note 7	
1,2,4-Trichlorobenzene	120-82-1	
1,1,1-Trichloroethane	71-55-6	Methylchloroform
1,1,2-Trichloroethane	79-00-5	
Trichloroethylene	79-01-6	Trichloroethene; TCE
Trichlorofluoromethane	75-69-4	Freon 11, Fluorotrchloromethane, CFC-11
2,4,5-Trichlorophenol	95-95-4	
2,4,6-Trichlorophenol	88-06-2	
1,2,3-Trichloropropane	96-18-4	
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-triethyl ester
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro-
Vanadium	7440-62-2	
Vinyl acetate	108-05-4	Ethenyl ester acetic acid
Vinyl chloride	75-01-4	Chloroethene
Xylene ctotald	See note 8	Dimethylbenzene
Zinc	7440-66-6	

1 This table includes all the substances required for assessment monitoring under RCRA Subtitle D c40 CFR Part 258 Appendix IId. DNR GEMS parameter numbers for the substances in this table can be found at <http://www.dnr.wi.gov/org/aw/wm/monitor/>

2 Common names are those widely used in government regulations, scientific publications and commerce; synonyms exist for many chemicals.

3 Chemical Abstracts Service registry number.

4 This substance is often called Bisc2-chloroisopropyl ether, the name the Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2[-oxybis[2-chloro-cCAS RN 39638-32-9d.

5 Chlordane: This entry includes alpha-chlordane cCAS RN 5103-71-9d, beta-chlordane cCAS RN 5103-74-2d, gamma-chlordane cCAS RN 5566-34-7d, and constituents of chlordane cCAS RN 57-74-9 and CAS RN 12789-03-6d.

6 Polychlorinated biphenyls cCAS RN 01336-36-3d; this category contains congener chemicals, including constituents of Aroclor-1016 cCAS RN 12674-11-2d, Aroclor-

1221 cCAS RN 11104-28-2d, Aroclor-1232 cCAS RN 11141-16-5d, Aroclor-1242 cCAS RN 53469-21-9d, Aroclor-1248 cCAS RN 12672-29-6d, Aroclor-1254 cCAS RN 11097-69-1d and Aroclor-1260 cCAS RN 11096-82-5d.

7 Toxaphene: This entry includes congener chemicals contained in technical toxaphene cCAS RN 8001-35-2d, i.e., chlorinated camphene.

8 Xylene ctotald: This entry includes o-xylene cCAS RN 96-47-6d, m-xylene cCAS RN 108-38-3d, p-xylene cCAS RN 106-42-3d, and unspecified xylenes cdimethylbenzenesd cCAS RN 1330-20-7d.