

**Chapter NR 661**

**APPENDIX VII**

**BASIS FOR LISTING HAZARDOUS WASTE**

EPA hazardous waste number	Hazardous constituents for which listed
F001 . . . . .	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons
F002 . . . . .	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane
F003 . . . . .	N.A.
F004 . . . . .	Cresols and cresylic acid, nitrobenzene
F005 . . . . .	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane
F006 . . . . .	Cadmium, hexavalent chromium, nickel, cyanide (complexed)
F007 . . . . .	Cyanide (salts)
F008 . . . . .	Cyanide (salts)
F009 . . . . .	Cyanide (salts)
F010 . . . . .	Cyanide (salts)
F011 . . . . .	Cyanide (salts)
F012 . . . . .	Cyanide (complexed)
F019 . . . . .	Hexavalent chromium, cyanide (complexed)
F020 . . . . .	Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F021 . . . . .	Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives
F022 . . . . .	Tetra-, penta- and hexachlorodibenzo-p-dioxins; tetra-, penta- and hexachlorodibenzofurans
F023 . . . . .	Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F024 . . . . .	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene
F025 . . . . .	Chloromethane; Dichloromethane; Trichloromethane; Carbon tetrachloride; Chloroethylene; 1,1-Dichloroethane; 1,2-Dichloroethane; trans-1,2-Dichloroethylene; 1,1-Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethylene; Pentachloroethane; Hexachloroethane; Allyl chloride (3-Chloropropene); Dichloropropane; Dichloropropene; 2-Chloro-1,3-butadiene; Hexachloro-1,3-butadiene; Hexachlorocyclopentadiene; Benzene; Chlorobenzene; Dichlorobenzene; 1,2,4-Trichlorobenzene; Tetrachlorobenzene; Pentachlorobenzene; Hexachlorobenzene; Toluene; Naphthalene
F026 . . . . .	Tetra-, penta- and hexachlorodibenzo-p-dioxins; tetra-, penta- and hexachlorodibenzofurans
F027 . . . . .	Tetra-, penta- and hexachlorodibenzo-p-dioxins; tetra-, penta- and hexachlorodibenzofurans; tri-, tetra- and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F028 . . . . .	Tetra-, penta- and hexachlorodibenzo-p-dioxins; tetra-, penta- and hexachlorodibenzofurans; tri-, tetra- and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts
F032 . . . . .	Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium; tetra-, penta-, hexa- and heptachlorodibenzo-p-dioxins; tetra-, penta-, hexa- and heptachlorodibenzofurans
F034 . . . . .	Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium

EPA hazardous waste number	Hazardous constituents for which listed
F035 . . . . .	Arsenic, chromium, lead
F037 . . . . .	Benzene, benzo(a)pyrene, chrysene, lead, chromium
F038 . . . . .	Benzene, benzo(a)pyrene chrysene, lead, chromium
F039 . . . . .	All constituents for which treatment standards are specified for multi-source leachate (wastewaters and non-wastewaters) under s. NR 668.43(1), Table CCW
K001 . . . . .	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene
K002 . . . . .	Hexavalent chromium, lead
K003 . . . . .	Hexavalent chromium, lead
K004 . . . . .	Hexavalent chromium
K005 . . . . .	Hexavalent chromium, lead
K006 . . . . .	Hexavalent chromium
K007 . . . . .	Cyanide (complexed), hexavalent chromium
K008 . . . . .	Hexavalent chromium
K009 . . . . .	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid
K010 . . . . .	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde
K011 . . . . .	Acrylonitrile, acetonitrile, hydrocyanic acid
K013 . . . . .	Hydrocyanic acid, acrylonitrile, acetonitrile
K014 . . . . .	Acetonitrile, acrylamide
K015 . . . . .	Benzyl chloride, chlorobenzene, toluene, benzotrichloride
K016 . . . . .	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene
K017 . . . . .	Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis(2-chloroethyl) ethers], trichloropropane, dichloropropanols
K018 . . . . .	1,2-Dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene
K019 . . . . .	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride
K020 . . . . .	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride
K021 . . . . .	Antimony, carbon tetrachloride, chloroform
K022 . . . . .	Phenol, tars (polycyclic aromatic hydrocarbons)
K023 . . . . .	Phthalic anhydride, maleic anhydride
K024 . . . . .	Phthalic anhydride, 1,4-naphthoquinone
K025 . . . . .	meta-Dinitrobenzene, 2,4-dinitrotoluene
K026 . . . . .	Paraldehyde, pyridines, 2-picoline
K027 . . . . .	Toluene diisocyanate, toluene-2,4-diamine
K028 . . . . .	1,1,1-Trichloroethane, vinyl chloride
K029 . . . . .	1,2-Dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform
K030 . . . . .	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride
K031 . . . . .	Arsenic
K032 . . . . .	Hexachlorocyclopentadiene
K033 . . . . .	Hexachlorocyclopentadiene
K034 . . . . .	Hexachlorocyclopentadiene
K035 . . . . .	Creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenzo(a)anthracene, acenaphthalene
K036 . . . . .	Toluene, phosphorodithioic and phosphorothioic acid esters
K037 . . . . .	Toluene, phosphorodithioic and phosphorothioic acid esters
K038 . . . . .	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters
K039 . . . . .	Phosphorodithioic and phosphorothioic acid esters
K040 . . . . .	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters

EPA hazardous waste number	Hazardous constituents for which listed
K041 . . . . .	Toxaphene
K042 . . . . .	Hexachlorobenzene, ortho-dichlorobenzene
K043 . . . . .	2,4-Dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol
K044 . . . . .	N.A.
K045 . . . . .	N.A.
K046 . . . . .	Lead
K047 . . . . .	N.A.
K048 . . . . .	Hexavalent chromium, lead
K049 . . . . .	Hexavalent chromium, lead
K050 . . . . .	Hexavalent chromium
K051 . . . . .	Hexavalent chromium, lead
K052 . . . . .	Lead
K060 . . . . .	Cyanide, naphthalene, phenolic compounds, arsenic
K061 . . . . .	Hexavalent chromium, lead, cadmium
K062 . . . . .	Hexavalent chromium, lead
K069 . . . . .	Hexavalent chromium, lead, cadmium
K071 . . . . .	Mercury
K073 . . . . .	Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane
K083 . . . . .	Aniline, diphenylamine, nitrobenzene, phenylenediamine
K084 . . . . .	Arsenic
K085 . . . . .	Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride
K086 . . . . .	Lead, hexavalent chromium
K087 . . . . .	Phenol, naphthalene
K088 . . . . .	Cyanide (complexes)
K093 . . . . .	Phthalic anhydride, maleic anhydride
K094 . . . . .	Phthalic anhydride
K095 . . . . .	1,1,2-Trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane
K096 . . . . .	1,2-Dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane
K097 . . . . .	Chlordane, heptachlor
K098 . . . . .	Toxaphene
K099 . . . . .	2,4-Dichlorophenol, 2,4,6-trichlorophenol
K100 . . . . .	Hexavalent chromium, lead, cadmium
K101 . . . . .	Arsenic
K102 . . . . .	Arsenic
K103 . . . . .	Aniline, nitrobenzene, phenylenediamine
K104 . . . . .	Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine
K105 . . . . .	Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol
K106 . . . . .	Mercury
K107 . . . . .	1,1-Dimethylhydrazine (UDMH)
K108 . . . . .	1,1-Dimethylhydrazine (UDMH)
K109 . . . . .	1,1-Dimethylhydrazine (UDMH)
K110 . . . . .	1,1-Dimethylhydrazine (UDMH)
K111 . . . . .	2,4-Dinitrotoluene
K112 . . . . .	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline
K113 . . . . .	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline
K114 . . . . .	2,4-Toluenediamine, o-toluidine, p-toluidine
K115 . . . . .	2,4-Toluenediamine

EPA hazardous waste number	Hazardous constituents for which listed
K116 . . . . .	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene
K117 . . . . .	Ethylene dibromide
K118 . . . . .	Ethylene dibromide
K123 . . . . .	Ethylene thiourea
K124 . . . . .	Ethylene thiourea
K125 . . . . .	Ethylene thiourea
K126 . . . . .	Ethylene thiourea
K131 . . . . .	Dimethyl sulfate, methyl bromide
K132 . . . . .	Methyl bromide
K136 . . . . .	Ethylene dibromide
K141 . . . . .	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
K142 . . . . .	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
K143 . . . . .	Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene
K144 . . . . .	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene
K145 . . . . .	Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene
K147 . . . . .	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
K148 . . . . .	Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
K149 . . . . .	Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene
K150 . . . . .	Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene
K151 . . . . .	Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene
K156 . . . . .	Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine
K157 . . . . .	Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine
K158 . . . . .	Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylene chloride
K159 . . . . .	Benzene, butylate, eptc, molinate, pebulate, vernolate
K161 . . . . .	Antimony, arsenic, metam-sodium, ziram
K169 . . . . .	Benzene
K170 . . . . .	Benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7,12-dimethylbenz(a)anthracene
K171 . . . . .	Benzene, arsenic
K172 . . . . .	Benzene, arsenic
K174 . . . . .	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8- Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9- Heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF), HxCDDs (All Hexachlorodibenzo-p-dioxins), HxCDFs (All Hexachlorodibenzofurans), PeCDDs (All Pentachlorodibenzo-p-dioxins), OCDD (1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin), OCDF (1,2,3,4,6,7,8,9-Octachlorodibenzofuran), PeCDFs (All Pentachlorodibenzofurans), TCDDs (All Tetrachlorodibenzo-p-dioxins), TCDFs (All Tetrachlorodibenzofurans)
K175 . . . . .	Mercury
K176 . . . . .	Arsenic, lead
K177 . . . . .	Antimony
K178 . . . . .	Thallium
K181 . . . . .	Aniline, o-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, 1,3-phenylenediamine.

N.A. – Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity or reactivity.