



P List of Acute Hazardous Wastes & Managing Acute Hazardous Wastes

Listed hazardous wastes

In Minnesota, a waste may be hazardous for one of these reasons:

- It displays a hazardous waste characteristic
- It is recorded in one of four lists of hazardous waste – the K, F, P, or U List
- It contains polychlorinated biphenyls (PCBs)

This document will discuss the P List of hazardous wastes.

For more information on the other lists, PCBs, or hazardous waste characteristics, visit the Minnesota Pollution Control Agency's (MPCA) hazardous waste publications webpage at <http://www.pca.state.mn.us/waste/pubs/business.html> and view hazardous waste fact sheets #2.00, 2.01, 2.03, 2.04, 2.05, and 4.48a.

Explanation of P List and Acute Hazardous Wastes

The P List regulates discarded commercial chemical products, manufacturing chemical intermediates, and off-specification commercial chemical products that contain certain ingredients, and any soil or debris contaminated by spills of those products or intermediates.

Acute hazardous wastes include all P-listed wastes and these six F-listed wastes: F020, F021, F022, F023, F026, and F027. Acute hazardous wastes are subject to more stringent generator accumulation requirements (discussed on page 11) than other hazardous wastes.

P List in Minnesota

The MPCA has adopted the federal P List of hazardous wastes, located in Chapter 40 of the Code of Federal Regulations (CFR), part 261.33, as amended. Because Minnesota adopted the federal list, changes made to the list by the U.S. Environmental Protection Agency (EPA) are implemented automatically in Minnesota.

Wastes mixed with listed waste

If a listed waste is mixed with any other waste, the entire mixture then takes on the listed waste's identity and requirements. Examples of listed mixtures include P-listed pharmaceuticals placed into a sharps container or P-listed pesticides mixed into other waste liquids. The resulting sharps container waste and liquids become regulated as P-listed wastes.

Reducing listed waste

Reducing the amount of listed hazardous waste you generate can lower your costs as well as make complying with the regulatory requirements easier. The [Minnesota Technical Assistance Program](#) (MnTAP) has staff and resources to help you assess alternate products and processes with a goal of reducing your listed waste generation. To contact information MnTAP, see *More information*, page 12.

Sole active ingredient

A waste is regulated under the P List only if the ingredient contained in the list is the sole active ingredient of the product that became waste. Active ingredients are those that perform the function of the product, regardless of the concentration of those ingredients. Ingredients used as preservatives, solvents, stabilizers, and adjuncts are not active ingredients unless that is the function of the product.

Examples

- Sodium azide is the sole active ingredient in some broad-spectrum pesticides. These pesticides would be P listed as P105 acute hazardous wastes if disposed of unused.
- Some automotive airbag activators, however, contain ferric oxide as an oxidizer in addition to sodium azide as a propellant, both active ingredients. These activators would not be P-listed wastes when disposed of, because the sodium azide was not the sole active ingredient.
- Finally, some pregnancy test strips contain sodium azide as a preservative. These strips would not be P-listed wastes when disposed of because the sodium azide was not an active ingredient.

Disposed of “unused”

A waste is only regulated under the P List if it is disposed of without being used for its intended purpose. Dilution or other preparation of the material for use is not considered use. “Use” is only what was intended or reasonable for the original compound.

For example, the broad-spectrum pesticide referenced in the examples above would be P listed as P105 acute hazardous waste if disposed of before use – even if it was diluted or otherwise altered in preparation for use before being discarded. The overspray rinsed from a crop duster airplane after a flight, however, would no longer be a P-listed waste because it was already applied for use.

Waste not meeting P List definition may still be characteristic hazardous waste

Remember that even though a waste may not or may no longer meet the definition of the P List, it still may display one or more hazardous waste characteristics and therefore remain regulated as a hazardous waste. For example, used osmium tetroxide microscopy stain would be a MN01 lethal hazardous waste if disposed of at a concentration greater than 3%. For more information on the lethality characteristic, visit the MPCA at <http://www.pca.state.mn.us/publications/w-hw2-05.pdf> to view hazardous waste fact sheet #2.05, [The Lethality Characteristic](#).

All wastes with the generic name contained in the P List are regulated

Although a single Chemical Abstract Service (CAS) Registry Number accompanies each waste contained in the P List, the CAS Number is included only as an aid to identification and does not restrict the list to the unique chemical identified by that CAS Number. All wastes having the generic name contained in the P List are regulated, regardless of their specific CAS Numbers.

Reason for listing

Each waste on the P List is included for one or more of the following reasons identified by the capitalized letters in parentheses following the generic name:

- Acute toxicity (H)
- Reactive (R)
- Toxic (T)

Listing-specific information

Many wastes on the P List have additional listing-specific information associated with them, including special definitions and possible exemptions. In this document, the numbers in superscript that follow the reason for listing reference this information. Numbers are explained on page 10.

Although the MPCA has included the most common details in this guidance, the EPA may have issued additional interpretation not contained in this document.

Waste codes

A four-character hazardous waste code is assigned to each waste on the list. Use this code for annual reporting and identifying hazardous wastes on a manifest.

The list is organized alphabetically by the listed generic name. Remember that many chemical compounds are known by many chemical names, and only some of those names may be printed here.

P List

Waste code	CAS Registry #	Generic name	Reason
P023	107-20-0	Acetaldehyde, chloro-	(H)
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-	(H)
P057	640-19-7	Acetamide, 2-fluoro-	(H)
P058	62-74-8	Acetic acid, fluoro-, sodium salt	(H)
P002	591-08-2	1-Acetyl-2-thiourea	(H)
P003	107-02-8	Acrolein	(H)
P070	116-06-3	Aldicarb	(H)
P203	1646-88-4	Aldicarb sulfone	(H)
P004	309-00-2	Aldrin	(H)
P005	107-18-6	Allyl alcohol	(H)
P006	20859-73-8	Aluminum phosphide	(R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol	(H)
P008	504-24-5	4-Aminopyridine	(H)
P009	131-74-8	Ammonium picrate	(R) ¹
P119	7803-55-6	Ammonium vanadate	(H)
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium	(H)
P010	7778-39-4	Arsenic acid H ₃ AsO ₄	(H)
P012	1327-53-3	Arsenic oxide As ₂ O ₃	(H)
P011	1303-28-2	Arsenic oxide As ₂ O ₅	(H)
P011	1303-28-2	Arsenic pentoxide	(H)
P012	1327-53-3	Arsenic trioxide	(H)
P038	692-42-2	Arsine, diethyl-	(H)
P036	696-28-6	Arsonous dichloride, phenyl-	(H)
P054	151-56-4	Aziridine	(H)
P067	75-55-8	Aziridine, 2-methyl-	(H)
P013	542-62-1	Barium cyanide	(H)
P024	106-47-8	Benzenamine, 4-chloro-	(H)
P077	100-01-6	Benzenamine, 4-nitro-	(H)

Waste code	CAS Registry #	Generic name	Reason
P028	100-44-7	Benzene, (chloromethyl)-	(H)
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-	(H) ⁷
P046	122-09-8	Benzenethanamine, alpha,alpha-dimethyl-	(H)
P014	108-98-5	Benzenethiol	(H)
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	(H)
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)	(H)
P001	81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%	(H) ^{2,5}
P028	100-44-7	Benzyl chloride	(H)
P015	7440-41-7	Beryllium powder	(H) ⁴
P017	598-31-2	Bromoacetone	(H)
P018	357-57-3	Brucine	(H)
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime	(H)
P021	592-01-8	Calcium cyanide	(H)
P021	592-01-8	Calcium cyanide Ca(CN) ₂	(H)
P189	55285-14-8	Carbamic acid, [(dibutylamino)- thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester	(H)
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H-pyrazol-3-yl ester	(H)
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester	(H)
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester	(H)
P127	1563-66-2	Carbofuran	(H)
P022	75-15-0	Carbon disulfide	(H)
P095	75-44-5	Carbonic dichloride	(H)
P189	55285-14-8	Carbosulfan	(H)
P023	107-20-0	Chloroacetaldehyde	(H)
P024	106-47-8	p-Chloroaniline	(H)
P026	5344-82-1	1-(o-Chlorophenyl)thiourea	(H)
P027	542-76-7	3-Chloropropionitrile	(H)
P029	544-92-3	Copper cyanide	(H)
P029	544-92-3	Copper cyanide Cu(CN)	(H)
P202	64-00-6	m-Cumenyl methylcarbamate	(H)
P030		Cyanides (soluble cyanide salts), not otherwise specified	(H)
P031	460-19-5	Cyanogen	(H)
P033	506-77-4	Cyanogen chloride	(H)
P033	506-77-4	Cyanogen chloride (CN)Cl	(H)
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol	(H)
P016	542-88-1	Dichloromethyl ether	(H)
P036	696-28-6	Dichlorophenylarsine	(H)
P037	60-57-1	Dieldrin	(H)
P038	692-42-2	Diethylarsine	(H)

Waste code	CAS Registry #	Generic name	Reason
P041	311-45-5	Diethyl-p-nitrophenyl phosphate	(H)
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate	(H)
P043	55-91-4	Diisopropylfluorophosphate (DFP)	(H)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,- hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-	(H)
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a- hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-	(H)
P037	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-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta, 7aalpha)-	(H)
P051	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-, (1aalpha,2beta,2abeta,3alpha, 6alpha,6abeta,7beta, 7aalpha)-, & metabolites	(H) ^{2,3}
P044	60-51-5	Dimethoate	(H)
P046	122-09-8	alpha,alpha-Dimethylphenethylamine	(H)
P191	644-64-4	Dimetilan	(H)
P047	534-52-1	4,6-Dinitro-o-cresol, & salts	(H) ²
P048	51-28-5	2,4-Dinitrophenol	(H)
P020	88-85-7	Dinoseb	(H)
P085	152-16-9	Diphosphoramidate, octamethyl-	(H)
P111	107-49-3	Diphosphoric acid, tetraethyl ester	(H)
P039	298-04-4	Disulfoton	(H)
P049	541-53-7	Dithiobiuret	(H)
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)- carbonyl]oxime	(H)
P050	115-29-7	Endosulfan	(H)
P088	145-73-3	Endothall	(H)
P051	72-20-8	Endrin	(H) ^{2,3}
P051	72-20-8	Endrin, & metabolites	(H) ^{2,3}
P042	51-43-4	Epinephrine	(H) ⁷
P031	460-19-5	Ethanedinitrile	(H)
P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N-[[[(methylamino) carbonyl]oxy]- 2-oxo-, methyl ester	(H)
P066	16752-77-5	Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester	(H)
P101	107-12-0	Ethyl cyanide	(H)
P054	151-56-4	Ethyleneimine	(H)
P097	52-85-7	Famphur	(H)
P056	7782-41-4	Fluorine	(H)
P057	640-19-7	Fluoroacetamide	(H)
P058	62-74-8	Fluoroacetic acid, sodium salt	(H)
P198	23422-53-9	Formetanate hydrochloride	(H)
P197	17702-57-7	Formparanate	(H)
P065	628-86-4	Fulminic acid, mercury(2+) salt	(R,T)
P059	76-44-8	Heptachlor	(H) ³
P062	757-58-4	Hexaethyl tetraphosphate	(H)

Waste code	CAS Registry #	Generic name	Reason
P116	79-19-6	Hydrazinecarbothioamide	(H)
P068	60-34-4	Hydrazine, methyl-	(H)
P063	74-90-8	Hydrocyanic acid	(H)
P063	74-90-8	Hydrogen cyanide	(H)
P096	7803-51-2	Hydrogen phosphide	(H)
P060	465-73-6	Isodrin	(H)
P192	119-38-0	Isolan	(H)
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate	(H)
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-	(H)
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,	(H)
P196	15339-36-3	Manganese dimethyldithiocarbamate	(H)
P092	62-38-4	Mercury, (acetato-O)phenyl-	(H)
P065	628-86-4	Mercury fulminate	(R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-	(H)
P064	624-83-9	Methane, isocyanato-	(H)
P016	542-88-1	Methane, oxybis[chloro-	(H)
P112	509-14-8	Methane, tetranitro-	(R) ¹
P118	75-70-7	Methanethiol, trichloro-	(H)
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride.	(H)
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[(methylamino)carbonyl]oxy]phenyl]-	(H)
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10- hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	(H)
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro-	(H) ³
P199	2032-65-7	Methiocarb.	(H)
P066	16752-77-5	Methomyl	(H)
P068	60-34-4	Methyl hydrazine	(H)
P064	624-83-9	Methyl isocyanate	(H)
P069	75-86-5	2-Methylactonitrile	(H)
P071	298-00-0	Methyl parathion	(H)
P190	1129-41-5	Metolcarb	(H)
P128	315-8-4	Mexacarbate	(H)
P072	86-88-4	alpha-Naphthylthiourea	(H)
P073	13463-39-3	Nickel carbonyl	(H)
P073	13463-39-3	Nickel carbonyl Ni(CO) ₄ , (T-4)-	(H)
P074	557-19-7	Nickel cyanide	(H)
P074	557-19-7	Nickel cyanide Ni(CN) ₂	(H)
P075	54-11-5	Nicotine, & salts	(H) ²
P076	10102-43-9	Nitric oxide	(H)
P077	100-01-6	p-Nitroaniline	(H)
P078	10102-44-0	Nitrogen dioxide	(H)
P076	10102-43-9	Nitrogen oxide NO	(H)

Waste code	CAS Registry #	Generic name	Reason
P078	10102-44-0	Nitrogen oxide NO ₂	(H)
P081	55-63-0	Nitroglycerine	(R) ¹
P082	62-75-9	N-Nitrosodimethylamine	(H)
P084	4549-40-0	N-Nitrosomethylvinylamine	(H)
P085	152-16-9	Octamethylpyrophosphoramidate	(H)
P087	20816-12-0	Osmium oxide OsO ₄ , (T-4)-	(H)
P087	20816-12-0	Osmium tetroxide	(H)
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	(H)
P194	23135-22-0	Oxamyl	(H)
P089	56-38-2	Parathion	(H)
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-	(H)
P048	51-28-5	Phenol, 2,4-dinitro-	(H)
P047	534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts	(H) ²
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	(H)
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt	(R) ¹
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	(H)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	(H)
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate	(H)
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	(H)
P092	62-38-4	Phenylmercury acetate	(H)
P093	103-85-5	Phenylthiourea	(H)
P094	298-02-2	Phorate	(H)
P095	75-44-5	Phosgene	(H)
P096	7803-51-2	Phosphine	(H)
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester	(H)
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	(H)
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	(H)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	(H)
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester	(H)
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester	(H)
P204	57-47-6	Physostigmine	(H)
P188	57-64-7	Physostigmine salicylate	(H)
P110	78-00-2	Plumbane, tetraethyl-	(H)
P098	151-50-8	Potassium cyanide	(H)
P098	151-50-8	Potassium cyanide K(CN)	(H)
P099	506-61-6	Potassium silver cyanide	(H)
P201	2631-37-0	Promecarb	(H)
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime	(H)
P203	1646-88-	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime	(H)
P101	107-12-0	Propanenitrile	(H)

Waste code	CAS Registry #	Generic name	Reason
P027	542-76-7	Propanenitrile, 3-chloro-	(H)
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	(H)
P081	55-63-0	1,2,3-Propanetriol, trinitrate	(R) ¹
P017	598-31-2	2-Propanone, 1-bromo-	(H)
P102	107-19-7	Propargyl alcohol	(H)
P003	107-02-8	2-Propenal	(H)
P005	107-18-6	2-Propen-1-ol	(H)
P067	75-55-8	1,2-Propylenimine	(H)
P102	107-19-7	2-Propyn-1-ol	(H)
P008	504-24-5	4-Pyridinamine	(H)
P075	54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts	(H)
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	(H)
P114	12039-52-0	Selenious acid, dithallium(1+) salt	(H)
P103	630-10-4	Selenourea	(H)
P104	506-64-9	Silver cyanide	(H)
P104	506-64-9	Silver cyanide Ag(CN)	(H)
P105	26628-22-8	Sodium azide	(H)
P106	143-33-9	Sodium cyanide	(H)
P106	143-33-9	Sodium cyanide Na(CN)	(H)
P108	57-24-9	Strychnidin-10-one, & salts	(H) ²
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-	(H)
P108	57-24-9	Strychnine, & salts	(H) ²
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt	(H)
P109	3689-24-5	Tetraethyldithiopyrophosphate	(H)
P110	78-00-2	Tetraethyl lead	(H)
P111	107-49-3	Tetraethyl pyrophosphate	(H)
P112	509-14-8	Tetranitromethane (R)	(R) ¹
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	(H)
P113	1314-32-5	Thallic oxide	(H)
P113	1314-32-5	Thallium oxide $Tl_2 O_3$	(H)
P114	12039-52-0	Thallium(I) selenite	(H)
P115	7446-18-6	Thallium(I) sulfate	(H)
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester	(H)
P045	39196-18-4	Thiofanox	(H)
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2 N)C(S)]_2 NH$	(H)
P014	108-98-5	Thiophenol	(H)
P116	79-19-6	Thiosemicarbazide	(H)
P026	5344-82-1	Thiourea, (2-chlorophenyl)-	(H)
P072	86-88-4	Thiourea, 1-naphthalenyl-	(H)
P093	103-85-5	Thiourea, phenyl-	(H)
P185	26419-73-8	Tirpate	(H)

Waste code	CAS Registry #	Generic name	Reason
P123	8001-35-2	Toxaphene	(H) ³
P118	75-70-7	Trichloromethanethiol	(H)
P119	7803-55-6	Vanadic acid, ammonium salt	(H)
P120	1314-62-1	Vanadium oxide V ₂ O ₅	(H)
P120	1314-62-1	Vanadium pentoxide	(H)
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-	(H)
P001	81-81-2	Warfarin, & salts, when present at concentrations > 0.3%	(H) ^{2,5}
P205	137-30-4	Zinc, bis(dimethylcarbomodithioato-S,S')-,	(H)
P121	557-21-1	Zinc cyanide	(H)
P121	557-21-1	Zinc cyanide Zn(CN) ₂	(H)
P122	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations > 10%	(R,T) ⁶
P205	137-30-4	Ziram	(H)

Acute Hazardous Waste F List

A four-character hazardous waste code is assigned to each waste on the list. Use this code for annual reporting and manifesting of hazardous wastes.

Waste code	CAS Registry #	Generic name	Reason
F020		Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives.	(H)
F021		Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	(H)
F022		Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H)
F023		Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols.	(H)
F026		Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H)
F027		Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols, including, but not limited to:	(H) ⁸
F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	(H)
F027	87-86-5	Pentachlorophenol	(H)
F027	87-86-5	Phenol, pentachloro-	(H)
F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-	(H)
F027	95-95-4	Phenol, 2,4,5-trichloro-	(H)

Waste code	CAS Registry #	Generic name	Reason
F027	88-06-2	Phenol, 2,4,6-trichloro-	(H)
F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	(H)
F027	93-72-1	Silvex (2,4,5-TP)	(H)
F027	93-76-5	2,4,5-T	(H)
F027	58-90-2	2,3,4,6-Tetrachlorophenol	(H)
F027	95-95-4	2,4,5-Trichlorophenol	(H)8
F027	88-06-2	2,4,6-Trichlorophenol	(H)

Explanation of superscripts

1. Wastes are not P Listed if the sole active ingredient was listed only for reactivity and the waste does not exhibit the characteristic of reactivity at the time it becomes a waste.

For more information on this exemption, see MPCA hazardous waste fact sheet #8.01, [Exclusion of Some Characteristic Wastes under Certain Conditions](http://www.pca.state.mn.us/publications/w-hw8-01.pdf), at <http://www.pca.state.mn.us/publications/w-hw8-01.pdf>.

2. These listings include both the named parent compound and also daughter compound salts or other daughter compounds. The CAS Registry Number is given only for the parent compound.
3. Above certain concentrations, the wastes in these listings are hazardous due to the toxicity characteristic regardless of whether they meet the P List definition.

For more information on the toxicity characteristic, see MPCA hazardous waste fact sheet #2.04, [Characteristic Hazardous Wastes](http://www.pca.state.mn.us/publications/w-hw2-04.pdf), at <http://www.pca.state.mn.us/publications/w-hw2-04.pdf>.

4. If the concentration at disposal is greater than two percent, beryllium is hazardous for the lethality characteristic regardless of whether it meets the P List definition.

For more information on the Lethality Characteristic, see MPCA hazardous waste fact sheet #2.05, [The Lethality Characteristic](http://www.pca.state.mn.us/publications/w-hw2-05.pdf), at <http://www.pca.state.mn.us/publications/w-hw2-05.pdf>.

5. Warfarin at an original concentration of 0.3 percent or less is a U-listed hazardous waste (U248).

For more information on the U List, see MPCA hazardous waste fact sheet #2.03, [U List of Hazardous Waste](http://www.pca.state.mn.us/publications/w-hw2-03.pdf), at <http://www.pca.state.mn.us/publications/w-hw2-03.pdf>.

6. Zinc phosphide at an original concentration of 10 percent or less is a U-listed hazardous waste (U249).

7. Only epinephrine base is a P-listed acute hazardous waste (P042). Epinephrine salts are not P-listed. However, when disposed of at a concentration of 0.24 percent or more, pharmaceutical epinephrine base or salts are hazardous for the lethality characteristic regardless of whether they meet the P List definition.

For more information on epinephrine, see MPCA hazardous waste fact sheet #3.35, [Regulatory Consensus on Health Care Issues](http://www.pca.state.mn.us/publications/w-hw3-35.pdf), at <http://www.pca.state.mn.us/publications/w-hw3-35.pdf>.

8. F027 does not include formulations containing hexachlorophene synthesized from pre-purified 2,4,5-trichlorophenol as the sole component.

Managing Acute Hazardous Wastes

If you generate acute hazardous waste, you are subject to these more stringent requirements.

Generator status

If you generate:

- Any amount of acute hazardous waste in a calendar year, your site is ineligible to be considered a Minimal Quantity Generator (MiniQG) for that year.
- One kilogram (2.2 pounds) or less of acute hazardous waste in a month, calculate the status of your site monthly using the total volume of all hazardous wastes generated.
- More than one kilogram of acute hazardous waste in a month, your site is regulated as a Large Quantity Generator (LQG), regardless of the volume of other hazardous wastes you generated.

When determining the status of your site, do not average your annual generation; use the actual amount generated each month. You need count only the actual mass of acute hazardous waste or rinsate you generate; you need not include the mass of containers in your calculations.

For more information on the determining your generator status, see hazardous waste fact sheet #1.01, [Evaluate Waste; Determine Generator Size](http://www.pca.state.mn.us/publications/w-hw1-01.pdf), at <http://www.pca.state.mn.us/publications/w-hw1-01.pdf>.

Satellite accumulation

While you may accumulate up to 55 gallons in each satellite accumulation area of non-acute hazardous wastes, you may only accumulate up to one quart of acute hazardous wastes in each satellite accumulation area. Once you reach this volume limit, you must manage that accumulated acute hazardous waste under the full hazardous waste container requirements within three days, including performing weekly inspections and attaching an accumulation start date to the container. Acute hazardous waste accumulated only under the satellite accumulation exemption does not trigger the enhanced generator requirements discussed below.

For more information on satellite accumulation, see hazardous waste fact sheet #1.04/1.05, [Label and Store Hazardous Waste](http://www.pca.state.mn.us/publications/w-hw1-04-05.pdf), at <http://www.pca.state.mn.us/publications/w-hw1-04-05.pdf>.

Other than satellite accumulation

If you are a:

- Very Small Quantity Generator (VSQG) and accumulate up to one kilogram of acute hazardous waste, not counting satellite accumulation, you must meet all of the requirements applicable to a Small Quantity Generator (SQG) except the 180 day accumulation time limit, including employee training, designation of an emergency coordinator, and attempting to make arrangements with local emergency response agencies and hospitals. You may continue to accumulate all of your hazardous waste indefinitely up to the applicable volume limits. Your site remains a VSQG for all other purposes.
A VSQG healthcare provider or pharmacy accumulating only less than one kilogram of finished-form pharmaceutical acute hazardous wastes is exempt from these SQG requirements if wastes are accumulated in compatible closed and labeled containers that are inspected at least weekly.
- SQG and accumulate one kilogram or less of acute hazardous waste, not counting satellite accumulation, no additional requirements apply to your site.
- VSQG or SQG and accumulate more than one kilogram of acute hazardous waste, not counting satellite accumulation, you must meet all the requirements applicable to a Large Quantity Generator (LQG), including the 90 day accumulation time limit. Your site remains a VSQG or SQG for all other purposes.
- LQG, no additional requirements apply to your site.

Acute hazardous waste containers

Containers that held an acute hazardous waste or a product that would become an acute hazardous waste when disposed of are not “empty” for hazardous waste purposes unless they have been triple-rinsed with a solvent that will dissolve the acute hazardous waste or product. The solvent must then be managed as an acute hazardous waste, including being counted as an acute hazardous waste towards your generator status.

For more information on empty containers, see MPCA hazardous waste fact sheet #4.16, [Managing Empty Containers](http://www.pca.state.mn.us/publications/w-hw4-16.pdf), at <http://www.pca.state.mn.us/publications/w-hw4-16.pdf>

More information

Guidance and requirements in this fact sheet were compiled from multiple Minnesota Rules in Chapter 7045, and incorporates regulatory interpretation decisions made by the MPCA on July 2, 2004, November 25, 2008, and August 9, 2011. Visit the Office of the Revisor of Statutes at <https://www.revisor.mn.gov/pubs> to review the Minnesota Rules directly.

Your metropolitan county and the MPCA have staff available to answer waste management questions. For more information, contact your metropolitan county hazardous waste office or your nearest MPCA regional staff. For information about waste and toxicity reduction and alternative products, contact the Minnesota Technical Assistance Program (MnTAP). Metro County Hazardous Waste Offices

Metro County Hazardous Waste Offices

Anoka	763-422-7093
Carver	952-361-1800
Dakota	952-891-7557
Hennepin	612-348-3777
Ramsey	651-266-1199
Scott	952-496-8475
Washington.....	651-430-6655
Websites	http://www.co.[county].mn.us

Minnesota Technical Assistance Program

Toll free.....	1-800-247-0015
Metro	612-624-1300
Website	http://www.mntap.umn.edu

Minnesota Pollution Control Agency

Toll free (all offices).....	1-800-657-3864
Brainerd.....	218-828-2492
Detroit Lakes.....	218-847-1519
Duluth	218-723-4660
Mankato	507-389-5977
Marshall	507-537-7146
Rochester.....	507-285-7343
St. Paul	651-296-6300
Willmar	320-214-3786
Website	http://www.pca.state.mn.us

Small Business Environmental Assistance

Toll free.....	1-800-657-3938
Metro	651-282-6143
Website	http://www.pca.state.mn.us/sbeap/