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LIST OF LISTS

Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act

- EPCRA Section 302 Extremely Hazardous Substances
- CERCLA Hazardous Substances
- EPCRA Section 313 Toxic Chemicals
- CAA 112(r) Regulated Chemicals For Accidental Release Prevention

Chemical Emergency Preparedness and Prevention Office

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LIST OF LISTS
Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 112(r) of the Clean Air Act

This consolidated chemical list includes chemicals subject to reporting requirements under the Emergency Planning and Community Right-to-Know Act (EPCRA), also known as Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)[1], and chemicals listed under section 112(r) of the Clean Air Act (CAA). This consolidated list has been prepared to help firms handling chemicals determine whether they need to submit reports under sections 302, 304, or 313 of EPCRA and, for a specific chemical, what reports may need to be submitted. It will also help firms determine whether they will be subject to accident prevention regulations under CAA section 112(r). Separate lists are also provided of Resource Conservation and Recovery Act (RCRA) waste streams and unlisted hazardous wastes, and of radionuclides reportable under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). These lists should be used as a reference tool, not as a definitive source of compliance information. Compliance information for EPCRA is published in the Code of Federal Regulations (CFR), 40 CFR Parts 302, 355, and 372. Compliance information for CAA section 112(r) is published in 40 CFR Part 68. This document is also available in a searchable database format at http://www.epa.gov/ceppo/ap-otgu.htm.

The chemicals on the consolidated list are ordered both by the Chemical Abstracts Service (CAS) registry number and alphabetically. For the list ordered by CAS number, categories of chemicals which generally do not have CAS registry numbers, but which are cited under CERCLA, are placed at the front of the list. EPCRA section 313 categories are placed at the end of the list with their 313 category code.

The lists include chemicals referenced under five federal statutory provisions, discussed below. More than one chemical name may be listed for one CAS number because the same chemical may appear on different lists under different names. For example, for CAS number 8001-35-2, the names toxaphene (from the section 313 list), camphechlor (from the section 302 list), and camphene, octachloro- (from the CERCLA list) all appear on this consolidated list. The chemical names on the consolidated lists generally are those names used in the regulatory programs developed under EPCRA, CERCLA, and CAA section 112(r), but each chemical may have other synonyms that do not appear on these lists.

(1) EPCRA Section 302 Extremely Hazardous Substances (EHSs)

The presence of EHSs in quantities at or above the Threshold Planning Quantity (TPQ) requires certain emergency planning activities to be conducted. The extremely hazardous substances and their TPQs are listed in 40 CFR Part 355, Appendices A and B. For section 302 EHSs, Local Emergency Planning Committees (LEPCs) must develop emergency response plans and facilities must notify the State Emergency Response Commission (SERC) and LEPC if they receive or produce the substance on site at or above the EHS's TPQ. Additionally if the TPQ is met, facilities with a listed EHS are subject to the reporting requirements of EPCRA section 311 (provide material safety data sheet or a list of covered chemicals to the SERC, LEPC, and local fire department) and section 312 (submit inventory

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[1] This consolidated list does not include all chemicals subject to the reporting requirements in EPCRA sections 311 and 312. These hazardous chemicals, for which material safety data sheets (MSDS) must be developed under the Hazard Communication Standard (29 CFR 1910.1200), are identified by broad criteria, rather than by enumeration. There are over 500,000 products that satisfy the criteria. See 40 CFR Part 370 for more information.

form - Tier I or Tier II). The minimum threshold for section 311-312 reporting for EHS substances is 500 pounds or the TPQ, whichever is less.

TPQ. The consolidated list presents the TPQ (in pounds) for section 302 chemicals in the column following the CAS number. For chemicals that are solids, there may be two TPQs given (e.g., 500/10,000). In these cases, the lower quantity applies for solids in powder form with particle size less than 100 microns, or if the substance is in solution or in molten form. Otherwise, the 10,000 pound TPQ applies.

EHS RQ. Releases of reportable quantities (RQ) of EHSs are subject to state and local reporting under section 304 of EPCRA. EPA has promulgated a rule (61 FR 20473, May 7, 1996) that adjusted RQs for EHSs without CERCLA RQs to levels equal to their TPQs. The EHS RQ column lists these adjusted RQs for EHSs not listed under CERCLA and the CERCLA RQs for those EHSs that are CERCLA hazardous substances (see the next section for a discussion of CERCLA Rqs).

Note that ammonium hydroxide is not covered under section 302; the EHS RQ is based on anhydrous ammonia. Ammonium hydroxide (which is also known as aqueous ammonia) is subject to CERCLA, with its own RQ.

(2) **CERCLA Hazardous Substances**

Releases of CERCLA hazardous substances, in quantities equal to or greater than their reportable quantity (RQ), are subject to reporting to the National Response Center under CERCLA. Such releases are also subject to state and local reporting under section 304 of EPCRA. CERCLA hazardous substances, and their reportable quantities, are listed in 40 CFR Part 302, Table 302.4. Radionuclides listed under CERCLA are provided in a separate list, with RQs in Curies.

RQ. The CERCLA RQ column in the consolidated list shows the RQs (in pounds) for chemicals that are CERCLA hazardous substances. Carbamate wastes under RCRA that have been added to the CERCLA list with statutory one-pound RQs are indicated by an asterisk ("*") following the RQ.

Metals. For metals listed under CERCLA (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc), no reporting of releases of the solid form is required if the mean diameter of the pieces of the solid metal released is greater than 100 micrometers (0.004 inches). The RQs shown on the consolidated list apply to smaller particles.

Note that the consolidated list does not include all CERCLA regulatory synonyms. See 40 CFR Part 302, Table 302.4 for a complete list.

There have been a few additions and deletions to Table 302.4 since this document was last updated (November 1998). Hazardous wastes K174 and K175 have been added to this list. Removed from Table 302.4 are caprolactam (CAS 105-60-2), 2,4,6-tribromophenol (CAS 118-79-6), and K140 floor sweepings, off-specification products and spent filtermedia from the production of 2,4,6-tribromophenol.

(3) CAA Section 112(r) List of Substances for Accidental Release Prevention

Under the accident prevention provisions of section 112(r) of the CAA, EPA developed a list of 77 toxic substances and 63 flammable substances. Threshold quantities (TQs) were established for these substances. The list and TQs identify processes subject to accident prevention regulations. The list of substances and TQs and the requirements for risk management programs for accidental release prevention are found in 40 CFR Part 68. This consolidated list includes both the common name for each listed chemical under section 112(r) and the chemical name, if different from the common name, as separate listings.

The CAA section 112(r) list includes several substances in solution that are covered only in concentrations above a specified level. These substances include ammonia (concentration 20% or greater) (CAS number 7664-41-7); hydrochloric acid (37% or greater) (7647-01-0); hydrogen fluoride/hydrofluoric acid (50% or greater) (7664-39-3); and nitric acid (80% or greater) (7697-37-2). Hydrogen chloride (anhydrous) and ammonia (anhydrous) are listed, in addition to the solutions of these substances, with different TQs. Only the anhydrous form of sulfur dioxide (7446-09-5) is covered. These substances are presented on the consolidated list with the concentration limit or specified form (e.g., anhydrous), as they are listed under CAA section 112(r). Flammable fuels used as a fuel or held for sale as a fuel at a retail facility are not subject to the rule.

TQ. The CAA section 112(r) TQ column in the consolidated list shows the TQs (in pounds) for chemicals listed for accidental release prevention. The TQ applies to the quantity of substance in a process, not at the facility as a whole.

(4) EPCRA Section 313 Toxic Chemicals

Emissions, transfers, and waste management data for chemicals listed under section 313 must be reported annually as part of the community right-to-know provisions of EPCRA (40 CFR Part 372).

Section 313. The notation "313" in the column for section 313 indicates that the chemical is subject to reporting under section 313 and section 6607 of the Pollution Prevention Act under the name listed. In cases where a chemical is listed under section 313 with a second name in parentheses or brackets, the second name is included on this consolidated list with an "X" in the section 313 column. An "X" in this column also may indicate that the same chemical with the same CAS number appears on another list with a different chemical name. Since the last updating of the list in November 1998, a number of reporting thresholds have changed. These include reporting thresholds for 18 chemicals that meet the EPCRA section 313 criteria for persistence and bioaccumulation, as well as lead and lead compounds (except lead contained in stainless steel, brass, and bronze alloys). Chemicals that have had reporting thresholds changed are marked with a " ^ " symbol on the list. The revised thresholds are listed at the end of this section.

Diisocyanates, Dioxins and Dioxin-like Compounds, and PACs. In the November 30, 1994, expansion of the section 313 list, 20 specific chemicals were added as members of the diisocyanate category, and 19 specific chemicals were added as members of the polycyclic aromatic compounds (PAC) category. In October 1999, EPA added a category of dioxin and dioxin-like compounds that includes 17 specific chemicals. These chemicals are included in the CAS order listing on this consolidated list. The symbol "#" following the "313" notation in the section 313 column identifies diisocyanates, the symbol "!" identifies the dioxin and dioxin-like compounds, and the symbol "+"

identifies PACs, as noted in the Summary of Codes. Chemicals belonging to these categories are reportable under section 313 by category, rather than by individual chemical name.

Ammonium Salts. The EPCRA section listing for ammonia includes the following qualifier "includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing". The qualifier for ammonia means that anhydrous forms of ammonia are 100% reportable and aqueous forms are limited to 10% of total aqueous ammonia. Therefore, when determining threshold and releases and other waste management quantities all anhydrous ammonia is included but only 10% of total aqueous ammonia is included. Any evaporation of ammonia from aqueous ammonia solutions is considered anhydrous ammonia and should be included in threshold determinations and release and other waste management calculations.

In this document ammonium salts are not specifically identified as being reportable EPCRA section 313 chemicals. However, water dissociable ammonia salts, such as ammonium chloride, are reportable if they are placed in water. When ammonium salts are placed in water, reportable aqueous ammonia is manufactured. As indicated in the ammonia qualifier, all aqueous ammonia solutions from water dissociable ammonium salts are covered by the ammonia listing. For example, ammonium chloride is a water dissociable ammonium salt and reportable aqueous ammonia will be manufactured when it is placed in water.

Unlike other ammonium salts, ammonium hydroxide is specifically identified as being a reportable EPCRA section 313 chemical. This is because the chemical ammonium hydroxide (NH4OH) is a misnomer. It is a common name used to describe a solution of ammonia in water (i.e., aqueous ammonia), typically a concentrated solution of 28 to 30 percent ammonia. EPA has consistently responded to questions regarding the reportability of these purported ammonium hydroxide solutions under the EPCRA Section 313 ammonia listing by stating that these are 28 to 30 percent solutions of ammonia in water and that the solutions are reportable under the EPCRA Section 313 ammonia listing. For a more detailed discussion, see page 34175 of the Federal Register final rule of June 30, 1995 (60 FR 34172). (See also EPA's EPCRA section 313, *Guidance for Reporting Aqueous Ammonia*, EPA 745-R-00-005, www.epa.gov/TRI)

Additions. Added to the list of toxic chemicals subject to reporting under EPCRA section 313 are seven chemicals and two chemical compound categories. These are:

Chemicals

	CAS
1) benzo(g,h,i)perylene	191242
2) benzo(j,k)fluorine (as a member of the PACs category)	206440
3) 3-methylcholanthrene (as a member of the PACs category)	56495
4) octachlorostyrene	29082744
5) pentachlorobenzene	608935
6) tetrabromobisphenol A	79947
7) vandium (except when contained in an alloy)	7440622

Chemical Categories

	Category Code
1) vandium compounds	N770

2) dioxin and dioxin like compounds (Manufacturing; and the processing or otherwise use of dioxin and dioxin like compounds if the dioxin and dioxin-like compounds are present as contaminants in a chemical and if they were created during the manufacturing of that chemical) N150

Stayed Chemicals. There are three EPRCA section 313 chemicals that are listed in the CFR but for which the Agency has issued an administrative stay that excludes them from reporting until the stays are lifted. These chemicals, identified by "313s" in the Sec. 313 table column, are methyl mercaptan (CAS number 74-93-1), hydrogen sulfide (CAS number 7783-06-4), and 2,2-dibromo-3-nitrilopropionamide (CAS number 10222-01-2). Check the TRI website (www.epa.gov/triexplorer) for updated regulatory information.

TRI Thresholds. Reporting under EPCRA section 313 is triggered by the quantity of a chemical that is manufactured, processed, or otherwise used during the calendar year. For most TRI chemicals, the thresholds are 25,000 pounds manufactured or processed or 10,000 pound otherwise used. EPA has recently lowered the reporting thresholds for certain chemicals and chemical categories that meet the criteria for persistence and bioaccumulation. The following list provides the thresholds for these chemicals(in pounds unless otherwise noted):

Chemical Name or Category	**CAS Number**	**Threshold (lbs)**
Aldrin	309-00-2	100
Benzo(g,h,i)perylene	191-24-2	10
Chlordane	57-74-9	10
Dioxin and dioxin-like compound category (manufacturing; and processing or otherwise use of dioxin and dioxin-like compounds if they are present as contaminants in a chemical and if they were created during the manufacture of that chemical)	NA	0.1 gram
Heptachlor	76-44-8	10
Hexachlorobenzene	118-74-1	10
Isodrin	465-73-6	10
Lead and lead compounds except lead contained in stainless steel, brass, and bronze alloys (applies to reporting for 2001(due July 2002) and later)	NA	100
Methoxychlor	72-43-5	100
Octachlorostyrene	29082-74-4	10
Pendimethalin	40487-42-1	100
Pentachlorobenzene	608-93-5	10
Polycyclic aromatic compounds category	NA	100
Polychlorinated biphenyls (PCBs)	1336-36-3	10

Tetrabromobisphenol A	79-94-7	100
Toxaphene	8001-35-2	10
Trifluralin	1582-09-8	100
Mercury	7439-97-6	10
Mercury compounds	NA	10

(5) **Chemical Categories**

The CERCLA and EPCRA section 313 lists include a number of chemical categories as well as specific chemicals. Categories appear on this consolidated list at the end of the CAS number listing. Specific chemicals listed as members of the diisocyanates, dioxin and dioxin-like compounds, and PAC categories under EPCRA section 313 (see section (4) above) are included in the list of specific chemicals by CAS number, not in the category listing. The chemicals on the consolidated list have not been systematically evaluated to determine whether they fall into any of the CERCLA listed categories, but EPA has attempted to identify those listed chemicals that are clearly reportable under one or more of the EPCRA section 313 categories.

Some chemicals not specifically listed under CERCLA may be subject to CERCLA reporting as part of a category. For example, strychnine sulfate (CAS number 60-41-3), listed under EPCRA section 302, is not individually listed on the CERCLA list, but is subject to CERCLA reporting under the listing for strychnine and salts (CAS number 57-24-9), with an RQ of 10 pounds. Similarly, nicotine sulfate (CAS number 65-30-5) is subject to CERCLA reporting under the listing for nicotine and salts (CAS number 54-11-5, RQ 100 pounds), and warfarin sodium (CAS number 129-06-6) is subject to CERCLA reporting under the listing for warfarin and salts, concentration >0.3% (CAS number 81-81-2, RQ 100 pounds). Note that some CERCLA listings, although they include CAS numbers, are for general categories and are not restricted to the specific CAS number (e.g., warfarin and salts). The CERCLA list also includes a number of generic categories that have not been assigned RQs; chemicals falling into these categories are considered CERCLA hazardous substances, but are not required to be reported under CERCLA unless otherwise listed under CERCLA with an RQ.

A number of chemical categories are subject to EPCRA section 313 reporting. Certain chemicals listed under EPCRA section 302, CERCLA, or CAA section 112(r) may belong to section 313 categories. For example, mercuric acetate (CAS number 1600-27-7), listed under section 302, is not specifically listed under section 313, but is reportable under the section 313 "Mercury Compounds" category (no CAS number). Listed chemicals that have been identified as being reportable under one or more EPCRA section 313 categories are identified by "313c" in the Sec. 313 table column.

(6) <u>RCRA Hazardous Wastes</u>

The consolidated list includes specific chemicals from the RCRA P and U lists only (40 CFR 261.33). This listing is provided as an indicator that companies may already have data on a specific chemical that may be useful for EPCRA reporting. It is not intended to be a comprehensive list of RCRA P and U chemicals. RCRA hazardous wastes consisting of waste streams on the F and K lists, and wastes exhibiting the characteristics of ignitability, corrosivity, reactivity, and toxicity, are provided in a

separate list. This list also includes carbamate wastes added to the CERCLA list with one-pound statutory RQs (indicated by an asterisk ("*") following the RQ). The descriptions of the F and K waste streams have been abbreviated; see 40 CFR Part 302, Table 302.4, or 40 CFR Part 261 for complete descriptions.

RCRA Code. The letter-and-digit code in the RCRA Code column is the chemical's RCRA hazardous waste code.

Summary of Codes

^ Reporting threshold has changed since November 1998.
+ Member of PAC category.
# Member of diisocyanate category.
X Indicates that this is a second name for a chemical already included on this consolidated list. May also indicate that the same chemical with the same CAS number appears on another list with a different chemical name.
* RCRA carbamate waste; statutory one-pound RQ applies until RQs are adjusted.
** This chemical was identified from a Premanufacture Review Notice (PMN) submitted to EPA. The submitter has claimed certain information on the submission to be confidential, including specific chemical identity.
*** Indicates that no RQ is assigned to this generic or broad class, although the class is a CERCLA hazardous substance. See 50 *Federal Register* 13456 (April 4, 1985). Values in Section 313 column represent Category Codes for reporting under Section 313.
c Although not listed by name and CAS number, this chemical is reportable under one or more of the EPCRA section 313 chemical categories.
s Indicates that this chemical is currently under an administrative stay of the EPCRA section 313 reporting requirements, therefore, no Toxics Release Inventory reports are required until the stay is removed.
! Member of the dioxin and dioxin-like compounds category.

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CONSOLIDATED LIST OF CHEMICALS (BY CAS NUMBER) SUBJECT TO THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) AND SECTION 112(r) OF THE CLEAN AIR ACT

NAME	CAS/ 313 Category Codes	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	RCRA CODE	CAA 112(r) TQ
Chlordane (Technical Mixture and Metabolites)	0			***			
Chlorinated Benzenes	0			***			
Chlorinated Ethanes	0			***			
Chlorinated Naphthalene	0			***			
Chloroalkyl Ethers	0			***			
Coke Oven Emissions	0			1			
DDT and Metabolites	0			***			
Dichlorobenzidine	0			***			
Diphenylhydrazine	0			***			
Endosulfan and Metabolites	0			***			
Endrin and Metabolites	0			***			
Fine mineral fibers	0			***			
Haloethers	0			***			
Halomethanes	0			***			
Heptachlor and Metabolites	0			***			
Nitrophenols	0			***			
Nitrosamines	0			***			
Organorhodium Complex (PMN-82-147)	0	10/10,000	10	**			
Phthalate Esters	0			***			
Polycyclic organic matter	0			***			
Polynuclear Aromatic Hydrocarbons	0			***			
Formaldehyde	50-00-0	500	100	100	313	U122	15,000
Formaldehyde (solution)	50-00-0	500	100	100	X	U122	15,000
Mitomycin C	50-07-7	500/10,000	10	10		U010	
Ergocalciferol	50-14-6	1,000/10,000	1,000				
Cyclophosphamide	50-18-0			10		U058	
DDT	50-29-3			1		U061	
Benzo[a]pyrene	50-32-8			1	313+^	U022	
Reserpine	50-55-5			5,000		U200	
Piperonyl butoxide	51-03-6				313		
5-Fluorouracil	51-21-8	500/10,000	500		X		
Fluorouracil	51-21-8	500/10,000	500		313		
2,4-Dinitrophenol	51-28-5			10	313	P048	
Epinephrine	51-43-4			1,000		P042	
2-Chloro-N-(2-chloroethyl)-N-methylethanamine	51-75-2	10	10		X		
Mechlorethamine	51-75-2	10	10		X		
Nitrogen mustard	51-75-2	10	10		313		
Carbamic acid, ethyl ester	51-79-6			100	X	U238	
Ethyl carbamate	51-79-6			100	X	U238	
Urethane	51-79-6			100	313	U238	
Carbachol chloride	51-83-2	500/10,000	500				
Phosphonic acid, (2,2,2-trichloro-1-hydroxyethyl)-,dimethyl ester	52-68-6			100	X		
Trichlorfon	52-68-6			100	313		
Famphur	52-85-7			1,000	313	P097	
Dibenz[a,h]anthracene	53-70-3			1	313+^	U063	

NAME	CAS/ 313 Category Codes	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	RCRA CODE	CAA 112(r) TQ
Sodium selenite	7782-82-3			100	313c		
Mercurous nitrate	7782-86-7			10	313c		
Selenious acid	7783-00-8	1,000/10,000	10	10	313c	U204	
Hydrogen sulfide	7783-06-4	500	100	100	313s	U135	10,000
Hydrogen selenide	7783-07-5	10	10		313c		500
Mercuric sulfate	7783-35-9			10	313c		
Lead fluoride	7783-46-2			10	313c		
Zinc fluoride	7783-49-5			1,000	313c		
Ferric fluoride	7783-50-8			100			
Antimony trifluoride	7783-56-4			1,000	313c		
Sulfur fluoride (SF4), (T-4)-	7783-60-0	100	100				2,500
Sulfur tetrafluoride	7783-60-0	100	100				2,500
Antimony pentafluoride	7783-70-2	500	500		313c		
Tellurium hexafluoride	7783-80-4	100	100				
Arsenous trichloride	7784-34-1	500	1	1	313c		15,000
Lead arsenate	7784-40-9			1	313c		
Potassium arsenate	7784-41-0			1	313c		
Arsine	7784-42-1	100	100				1,000
Sodium arsenite	7784-46-5	500/10,000	1	1	313c		
Sodium phosphate, tribasic	7785-84-4			5,000			
Mevinphos	7786-34-7	500	10	10	313		
Nickel sulfate	7786-81-4			100	313c		
Beryllium chloride	7787-47-5			1	313c		
Beryllium fluoride	7787-49-7			1	313c		
Beryllium nitrate	7787-55-5			1	313c		
Ammonium chromate	7788-98-9			10	313c		
Potassium chromate	7789-00-6			10	313c		
Strontium chromate	7789-06-2			10	313c		
Ammonium bichromate	7789-09-5			10	313c		
Cadmium bromide	7789-42-6			10	313c		
Cobaltous bromide	7789-43-7			1,000	313c		
Antimony tribromide	7789-61-9			1,000	313c		
Chlorosulfonic acid	7790-94-5			1,000			
Thallium chloride TlCl	7791-12-0	100/10,000	100	100	313c	U216	
Thallous chloride	7791-12-0	100/10,000	100	100	313c	U216	
Chlorine monoxide	7791-21-1						10,000
Chlorine oxide	7791-21-1						10,000
Selenium oxychloride	7791-23-3	500	500		313c		
Phosphine	7803-51-2	500	100	100	313	P096	5,000
Ammonium vanadate	7803-55-6			1,000	313c	P119	
Silane	7803-62-5						10,000
Camphechlor	8001-35-2	500/10,000	1	1	X	P123	
Camphene, octachloro-	8001-35-2	500/10,000	1	1	X	P123	
Toxaphene	8001-35-2	500/10,000	1	1	313^	P123	
Creosote	8001-58-9			1	313	U051	
Dichloropropane - Dichloropropene (mixture)	8003-19-8			100			
Pyrethrins	8003-34-7			1			
Oleum (fuming sulfuric acid)	8014-95-7			1,000			10,000
Sulfuric acid (fuming)	8014-95-7			1,000			10,000
Sulfuric acid, mixture with sulfur trioxide	8014-95-7			1,000			10,000
Demeton	8065-48-3	500	500				

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NAME	CAS/ 313 Category Codes	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	RCRA CODE	CAA 112(r) TQ
Abamectin	71751-41-2				313		
Acenaphthene	83-32-9			100			
Acenaphthylene	208-96-8			5,000			
Acephate	30560-19-1				313		
Acetaldehyde	75-07-0			1,000	313	U001	10,000
Acetaldehyde, trichloro-	75-87-6			5,000		U034	
Acetamide	60-35-5			100	313		
Acetic acid	64-19-7			5,000			
Acetic acid, (2,4-dichlorophenoxy)-	94-75-7			100	X	U240	
Acetic acid ethenyl ester	108-05-4	1,000	5,000	5,000	X		15,000
Acetic anhydride	108-24-7			5,000			
Acetone	67-64-1			5,000		U002	
Acetone cyanohydrin	75-86-5	1,000	10	10	X	P069	
Acetone thiosemicarbazide	1752-30-3	1,000/10,000	1,000				
Acetonitrile	75-05-8			5,000	313	U003	
Acetophenone	98-86-2			5,000	313	U004	
2-Acetylaminofluorene	53-96-3			1	313	U005	
Acetyl bromide	506-96-7			5,000			
Acetyl chloride	75-36-5			5,000		U006	
Acetylene	74-86-2						10,000
Acetylphosphoramidothioic acid O,S-dimethyl ester	30560-19-1				X		
1-Acetyl-2-thiourea	591-08-2			1,000		P002	
Acifluorfen, sodium salt	62476-59-9				313		
Acrolein	107-02-8	500	1	1	313	P003	5,000
Acrylamide	79-06-1	1,000/10,000	5,000	5,000	313	U007	
Acrylic acid	79-10-7			5,000	313	U008	
Acrylonitrile	107-13-1	10,000	100	100	313	U009	20,000
Acrylyl chloride	814-68-6	100	100				5,000
Adipic acid	124-04-9			5,000			
Adiponitrile	111-69-3	1,000	1,000				
Alachlor	15972-60-8				313		
Aldicarb	116-06-3	100/10,000	1	1	313	P070	
Aldicarb sulfone	1646-88-4			1*		P203	
Aldrin	309-00-2	500/10,000	1	1	313^	P004	
d-trans-Allethrin	28057-48-9				313		
Allyl alcohol	107-18-6	1,000	100	100	313	P005	15,000
Allylamine	107-11-9	500	500		313		10,000
Allyl chloride	107-05-1			1,000	313		
Aluminum (fume or dust)	7429-90-5				313		
Aluminum oxide (fibrous forms)	1344-28-1				313		
Aluminum phosphide	20859-73-8	500	100	100	313	P006	
Aluminum sulfate	10043-01-3			5,000			
Ametryn	834-12-8				313		
2-Aminoanthraquinone	117-79-3				313		
4-Aminoazobenzene	60-09-3				313		
4-Aminobiphenyl	92-67-1			1	313		
1-Amino-2-	82-28-0				313		

NAME	CAS/ 313 Category Codes	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	RCRA CODE	CAA 112(r) TQ
Hexazinone	51235-04-2				313		
Hydramethylnon	67485-29-4				313		
Hydrazine	302-01-2	1,000	1	1	313	U133	15,000
Hydrazine, 1,2-diethyl-	1615-80-1			10		U086	
Hydrazine, 1,1-dimethyl-	57-14-7	1,000	10	10	X	U098	15,000
Hydrazine, 1,2-dimethyl-	540-73-8			1		U099	
Hydrazine, 1,2-diphenyl-	122-66-7			10	X	U109	
Hydrazine, methyl-	60-34-4	500	10	10	X	P068	15,000
Hydrazine sulfate	10034-93-2				313		
Hydrazobenzene	122-66-7			10	X	U109	
Hydrochloric acid	7647-01-0			5,000			
Hydrochloric acid (conc 37% or greater)	7647-01-0			5,000			15,000
Hydrochloric acid (aerosol forms only)	7647-01-0			5,000	313		
Hydrocyanic acid	74-90-8	100	10	10	X	P063	2,500
Hydrofluoric acid	7664-39-3	100	100	100	X	U134	
Hydrofluoric acid (conc. 50% or greater)	7664-39-3	100	100	100	X	U134	1,000
Hydrogen	1333-74-0						10,000
Hydrogen chloride (anhydrous)	7647-01-0	500	5,000	5,000	X		5,000
Hydrogen chloride (gas only)	7647-01-0	500	5,000	5,000	X		5,000
Hydrogen cyanide	74-90-8	100	10	10	313	P063	2,500
Hydrogen fluoride	7664-39-3	100	100	100	313	U134	
Hydrogen fluoride (anhydrous)	7664-39-3	100	100	100	X	U134	1,000
Hydrogen peroxide (Conc.> 52%)	7722-84-1	1,000	1,000				
Hydrogen selenide	7783-07-5	10	10		313c		500
Hydrogen sulfide	7783-06-4	500	100	100	313s	U135	10,000
Hydroperoxide, 1-methyl-1-phenylethyl-	80-15-9			10	X	U096	
Hydroquinone	123-31-9	500/10,000	100	100	313		
Imazalil	35554-44-0				313		
Indeno(1,2,3-cd)pyrene	193-39-5			100	313+^	U137	
3-Iodo-2-propynyl butylcarbamate	55406-53-6				313		
Iron carbonyl (Fe(CO)5), (TB-5-11)-	13463-40-6	100	100		X		2,500
Iron, pentacarbonyl-	13463-40-6	100	100		313		2,500
Isobenzan	297-78-9	100/10,000	100				
Isobutane	75-28-5						10,000
Isobutyl alcohol	78-83-1			5,000		U140	
Isobutyraldehyde	78-84-2				313		
Isobutyronitrile	78-82-0	1,000	1,000				20,000
Isocyanic acid, 3,4-dichlorophenyl ester	102-36-3	500/10,000	500				
Isodrin	465-73-6	100/10,000	1	1	313^	P060	
Isofenphos	25311-71-1				313		
Isofluorphate	55-91-4	100	100	100		P043	
1H-Isoindole-1,3(2H)-dione, 3a,4,7,7a-tetrahydro-2-[(trichloromethyl)thio]-	133-06-2			10	X		
Isopentane	78-78-4						10,000
Isophorone	78-59-1			5,000			

RCRA WASTE STREAMS AND UNLISTED HAZARDOUS WASTES
THE DESCRIPTIONS OF THE WASTE STREAMS HAVE BEEN TRUNCATED.
THIS LIST SHOULD BE USED FOR REFERENCE ONLY
COMPLIANCE INFORMATION CAN BE FOUND IN 40 CFR PART 302 AND TABLE 302.4

RCRA CODE	RQ	NAME
F001	10	The following spent halogenated solvents used in degreasing:
	100	(a) Tetrachloroethylene (CAS No. 127-18-4, RCRA Waste No. U210)
	100	(b) Trichloroethylene (CAS No. 79-01-6, RCRA Waste No. U228)
	1,000	(c) Methylene chloride (CAS No. 75-09-2, RCRA Waste No. U080)
	1,000	(d) 1,1,1-Trichloroethane (CAS No. 71-55-6, RCRA Waste No. U226)
	10	(e) Carbon tetrachloride (CAS No. 56-23-5, RCRA Waste No. U211)
	5,000	(f) Chlorinated fluorocarbons
F002	10	The following spent halogenated solvents:
	100	(a) Tetrachloroethylene (CAS No. 127-18-4, RCRA Waste No. U210)
	1,000	(b) Methylene chloride (CAS No. 75-09-2, RCRA Waste No. U080)
	100	(c) Trichloroethylene (CAS No. 79-01-6, RCRA Waste No. U228)
	1,000	(d) 1,1,1-Trichloroethane (CAS No. 71-55-6, RCRA Waste No. U226)
	100	(e) Chlorobenzene (CAS No. 108-90-7, RCRA Waste No. U037)
	5,000	(f) 1,1,2-Trichloro-1,2,2-trifluoroethane (CAS No. 76-13-1)
	100	(g) o-Dichlorobenzene (CAS No. 95-50-1, RCRA Waste No. U070)
	5,000	(h) Trichlorofluoromethane (CAS No. 75-69-4, RCRA Waste No. U121)
	100	(i) 1,1,2-Trichloroethane (CAS No. 79-00-5, RCRA Waste No. U227)
F003	100	The following spent non-halogenated solvents and still bottoms from recovery:
	1,000	(a) Xylene (CAS No. 1330-20-7, RCRA Waste No. U239)
	5,000	(b) Acetone (CAS No. 67-64-1, RCRA Waste No. U002)
	5,000	(c) Ethyl acetate (CAS No. 141-78-6, RCRA Waste No. U112)
	1,000	(d) Ethylbenzene (CAS No. 100-41-4)
	100	(e) Ethyl ether (CAS No. 60-29-7, RCRA Waste No. U117)
	5,000	(f) Methyl isobutyl ketone (CAS No. 108-10-1, RCRA Waste No. U161)
	5,000	(g) n-Butyl alcohol (CAS No. 71-36-3, RCRA Waste No. U031)
	5,000	(h) Cyclohexanone (CAS No. 108-94-1, RCRA Waste No. U057)
	5,000	(i) Methanol (CAS No. 67-56-1, RCRA Waste No. U154)
F004	100	The following spent non-halogenated solvents and still bottoms from recovery:
	100	(a) Cresols/cresylic acid (CAS No. 1319-77-3, RCRA Waste No. U052)
	1,000	(b) Nitrobenzene (CAS No. 98-95-3, RCRA Waste No. U169)
F005	100	The following spent non-halogenated solvents and still bottoms from recovery:
	1,000	(a) Toluene (CAS No. 108-88-3, RCRA Waste No. U220)
	5,000	(b) Methyl ethyl ketone (CAS No. 78-93-3, RCRA Waste No. U159)
	100	(c) Carbon disulfide (CAS No. 75-15-0, RCRA Waste No. P022)
	5,000	(d) Isobutanol (CAS No. 78-83-1, RCRA Waste No. U140)
	1,000	(e) Pyridine (CAS No. 110-86-1, RCRA Waste No. U196)
F006	10	Wastewater treatment sludges from electroplating operations (w/some exceptions)
F007	10	Spent cyanide plating bath solns. from electroplating
F008	10	Plating bath residues from electroplating where cyanides are used
F009	10	Spent stripping/cleaning bath solns. from electroplating where cyanides are used
F010	10	Quenching bath residues from metal heat treating where cyanides are used
F011	10	Spent cyanide soln. from salt bath pot cleaning from metal heat treating
F012	10	Quenching wastewater sludges from metal heat treating where cyanides are used
F019	10	Wastewater treatment sludges from chemical conversion aluminum coating

F020	1	Wastes from prod. or use of tri/tetrachlorophenol or derivative intermediates
F021	1	Wastes from prod. or use of pentachlorophenol or intermediates for derivatives
F022	1	Wastes from use of tetra/penta/hexachlorobenzenes under alkaline conditions
F023	1	Wastes from mat. prod. on equip. previously used for tri\tetrachlorophenol
F024	1	Wastes from production of chlorinated aliphatic hydrocarbons (C1-C5)
F025	1	Lights ends, filters from prod. of chlorinated aliphatic hydrocarbons (C1-C5)
F026	1	Waste from equipment previously used to prod. tetra/penta/hexachlorobenzenes
F027	1	Discarded formulations containing tri/tetra/pentachlorophenols or derivatives
F028	1	Residues from incineration of soil contaminated w/ F020,F021,F022,F023,F026,F027
F032	1	Wastewaters, process residuals from wood preserving using chlorophenolic solns.
F034	1	Wastewaters, process residuals from wood preserving using creosote formulations
F035	1	Wastewaters, process residuals from wood preserving using arsenic or chromium
F037	1	Petroleum refinery primary oil/water/solids separation sludge
F038	1	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge
F039	1	Multisource leachate
K001	1	Wastewater treatment sludge from creosote/pentachlorophenol wood preserving
K002	10	Wastewater treatment sludge from prod. of chrome yellow and orange pigments
K003	10	Wastewater treatment sludge from prod. of molybdate orange pigments
K004	10	Wastewater treatment sludge from prod. of zinc yellow pigments
K005	10	Wastewater treatment sludge from prod. of chrome green pigments
K006	10	Wastewater treatment sludge from prod. of chrome oxide green pigments
K007	10	Wastewater treatment sludge from prod. of iron blue pigments
K008	10	Oven residue from prod. of chrome oxide green pigments
K009	10	Dist. bottoms from prod. of acetaldehyde from ethylene
K010	10	Dist. side cuts from prod. of acetaldehyde from ethylene
K011	10	Bottom stream from wastewater stripper in acrylonitrile prod.
K013	10	Bottom stream from acetonitrile column in acrylonitrile prod.
K014	5,000	Bottoms from acetonitrile purification column in acrylonitrile prod.
K015	10	Still bottoms from the dist. of benzyl chloride
K016	1	Heavy ends or dist. residues from prod. of carbon tetrachloride
K017	10	Heavy ends from the purification column in epichlorohydrin prod.
K018	1	Heavy ends from the fractionation column in ethyl chloride prod.
K019	1	Heavy ends from the dist. of ethylene dichloride during its prod.
K020	1	Heavy ends from the dist. of vinyl chloride during prod. of the monomer
K021	10	Aqueous spent antimony catalyst waste from fluoromethanes prod.
K022	1	Dist. bottom tars from prod. of phenol/acetone from cumene
K023	5,000	Dist. light ends from prod. of phthalic anhydride from naphthalene
K024	5,000	Dist. bottoms from prod. of phthalic anhydride from naphthalene
K025	10	Dist. bottoms from prod. of nitrobenzene by nitration of benzene
K026	1,000	Stripping still tails from the prod. of methyl ethyl pyridines
K027	10	Centrifuge/dist. residues from toluene diisocyanate prod.
K028	1	Spent catalyst from hydrochlorinator reactor in prod. of 1,1,1-trichloroethane
K029	1	Waste from product steam stripper in prod. of 1,1,1-trichloroethane
K030	1	Column bottoms/heavy ends from prod. of trichloroethylene and perchloroethylene
K031	1	By-product salts generated in the prod. of MSMA and cacodylic acid
K032	10	Wastewater treatment sludge from the prod. of chlordane
K033	10	Wastewaster/scrubwater from chlorination of cyclopentadiene in chlordane prod.
K034	10	Filter solids from filtration of hexachlorocyclopentadiene in chlordane prod.
K035	1	Wastewater treatment sludges from the prod. of creosote
K036	1	Still bottoms from toluene reclamation distillation in disulfoton prod.

K037	1	Wastewater treatment sludges from the prod. of disulfoton
K038	10	Wastewater from the washing and stripping of phorate production
K039	10	Filter cake from filtration of diethylphosphorodithioic adid in phorate prod.
K040	10	Wastewater treatment sludge from the prod. of phorate
K041	1	Wastewater treatment sludge from the prod. of toxaphene
K042	10	Heavy ends/residues from dist. of tetrachlorobenzene in 2,4,5-T prod.
K043	10	2,6-Dichlorophenol waste from the prod. of 2,4-D
K044	10	Wastewater treatment sludge from manuf. and processing of explosives
K045	10	Spent carbon from treatment of wastewater containing explosives
K046	10	Wastewater sludge from manuf.,formulating,loading of lead-based initiating compd
K047	10	Pink/red water from TNT operations
K048	10	Dissolved air flotation (DAF) float from the petroleum refining industry
K049	10	Slop oil emulsion solids from the petroleum refining industry
K050	10	Heat exchanger bundle cleaning sludge from petroleum refining industry
K051	10	API separator sludge from the petroleum refining industry
K052	10	Tank bottoms (leaded) from the petroleum refining industry
K060	1	Ammonia still lime sludge from coking operations
K061	10	Emission control dust/sludge from primary prod. of steel in electric furnaces
K062	10	Spent pickle liquor generated by steel finishing (SIC codes 331 and 332)
K064	10	Acid plant blowdown slurry/sludge from blowdown slurry from primary copper prod.
K065	10	Surface impoundment solids at primary lead smelting facilities
K066	10	Sludge from treatment of wastewater/acid plant blowdown from primary zinc prod.
K069	10	Emission control dust/sludge from secondary lead smelting
K071	1	Brine purification muds from mercury cell process in chlorine production
K073	10	Chlorinated hydrocarbon waste from diaphragm cell process in chlorine production
K083	100	Distillation bottoms from aniline extraction
K084	1	Wastewater sludges from prod. of veterinary pharm. from arsenic compds.
K085	10	Distillation or fractionation column bottoms in prod. of chlorobenzenes
K086	10	Wastes/sludges from prod. of inks from chromium and lead-containing substances
K087	100	Decanter tank tar sludge from coking operations
K088	10	Spent potliners from primary aluminum reduction
K090	10	Emission control dust/sludge from ferrochromiumsilicon prod.
K091	10	Emission control dust/sludge from ferrochromium prod.
K093	5,000	Dist. light ends from prod. of phthalic anhydride by ortho-xylene
K094	5,000	Dist. bottoms in prod. of phthalic anhydride by ortho-xylene
K095	100	Distillation bottoms in prod. of 1,1,1-trichloroethane
K096	100	Heavy ends from dist. column in prod. of 1,1,1-trichloroethane
K097	1	Vacuum stripper discharge from the chlordane chlorinator in prod. of chlordane
K098	1	Untreated process wastewater from the prod. of toxaphene
K099	10	Untreated wastewater from the prod. of 2,4-D
K100	10	Waste leaching soln from emission control dust/sludge in secondary lead smelting
K101	1	Dist. tar residue from aniline in prod. of veterinary pharm. from arsenic compd.
K102	1	Residue from activated carbon in prod. of veterinary pharm. from arsenic compds.
K103	100	Process residues from aniline extraction from the prod. of aniline
K104	10	Combined wastewater streams generated from prod. of nitrobenzene/aniline
K105	10	Aqueous stream from washing in prod. of chlorobenzenes
K106	1	Wastewater treatment sludge from mercury cell process in chlorine prod.
K107	10	Column bottoms from separation in prod. of UDMH from carboxylic acid hydrazides
K108	10	Condensed column overheads and vent gas from prod. of UDMH from -COOH hydrazides
K109	10	Spent filter catridges from purif. of UDMH prod. from carboxylic acid hydrazides

K110	10	Condensed column overheads from separation in UDMH prod. from -COOH hydrazides
K111	10	Product washwaters from prod. of dinitrotoluene via nitration of toluene
K112	10	Reaction by-product water from drying in toluenediamine prod from dinitrotoluene
K113	10	Condensed liquid light ends from purification of toluenediamine during its prod.
K114	10	Vicinals from purification of toluenediamine during its prod from dinitrotoluene
K115	10	Heavy ends from toluenediamine purification during prod. from dinitrotoluene
K116	10	Organic condensate from solvent recovery system in prod. of toluene diisocyanate
K117	1	Wastewater from vent gas scrubber in ethylene bromide prod by ethene bromination
K118	1	Spent absorbent solids in purification of ethylene dibromide in its prod.
K123	10	Process waterwater from the prod. of ethylenebisdithiocarbamic acid and salts
K124	10	Reactor vent scubber water from prod of ethylenebisdithiocarbamic acid and salts
K125	10	Filtration/other solids from prod. of ethylenebisdithiocarbamic acid and salts
K126	10	Dust/sweepings from the prod. of ethylenebisdithiocarbamic acid and salts
K131	100	Wastewater and spent sulfuric acid from the prod. of methyl bromide
K132	1,000	Spent absorbent and wastewater solids from the prod. of methyl bromide
K136	1	Still bottoms from ethylene dibromide purif. in prod. by ethene bromination
K141	1	Process residues from coal tar recovery in coking
K142	1	Tar storage tank residues from coke prod. from coal or recovery of coke by-prods
K143	1	Process residues from recovery of light oil in coking
K144	1	Wastewater residues from light oil refining in coking
K145	1	Residues from naphthalene collection and recovery from coke by-products
K147	1	Tar storage tank residues from coal tar refining in coking
K148	1	Residues from coal tar distillation, including still bottoms, in coking
K149	10	Distillation bottoms from the prod. of chlorinated toluenes/benzoyl chlorides
K150	10	Organic residuals from Cl gas and HCl recovery from chlorinated toluene prod.
K151	10	Wastewater treatment sludge from production of chlorotoluenes/benzoyl chlorides
K156	1*	Organic waste from production of carbamates and carbamoyl oximes
K157	1*	Wastewaters from production of carbamates and carbamoyl oximes (not sludges)
K158	1*	Bag house dusts & filter/separation solids from prod of carbamates, carb oximes
K159	1*	Organics from treatment of thiocarbamate waste
K161	1*	Purif. solids/bag house dust/sweepings from prod of dithiocarbamate acids/salts
K169	10	Crude oil storage tank sediment from refining operations
K170	1	Clarified slurry oil tank sediment of in-line filter/separation solids
K171	1	Spent hydrotreating catalyst
K172	1	Spent hydrorefining catalyst
K174	1	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (EDC/VCM)
K175	1	Wastewater treatment sludges from the production vinyl chloride monomer using mercuric chloride catalyst in an acetlyene-based process
D001	100	Unlisted hazardous wastes characteristic of ignitability
D002	100	Unlisted hazardous wastes characteristic of corrosivity
D003	100	Unlisted hazardous wastes characteristic of reactivity
		Unlisted hazardous wastes characteristic of toxicity:
D004	1	Arsenic
D005	1,000	Barium
D006	10	Cadmium
D007	10	Chromium
D008	10	Lead
D009	1	Mercury
D010	10	Selenium

D011	1	Silver
D012	1	Endrin
D013	1	Lindane
D014	1	Methoxychlor
D015	1	Toxaphene
D016	100	2,4-D
D017	100	2,4,5-TP
D018	10	Benzene
D019	10	Carbon tetrachloride
D020	1	Chlordane
D021	100	Chlorobenzene
D022	10	Chloroform
D023	100	o-Cresol
D024	100	m-Cresol
D025	100	p-Cresol
D026	100	Cresol
D027	100	1,4-Dichlorobenzene
D028	100	1,2-Dichloroethane
D029	100	1,1-Dichloroethylene
D030	10	2,4-Dinitrotoluene
D031	1	Heptachlor (and epoxide)
D032	10	Hexachlorobenzene
D033	1	Hexachlorobutadiene
D034	100	Hexachloroethane
D035	5,000	Methyl ethyl ketone
D036	1,000	Nitrobenzene
D037	10	Pentachlorophenol
D038	1,000	Pyridine
D039	100	Tetrachloroethylene
D040	100	Trichloroethylene
D041	10	2,4,5-Trichlorophenol
D042	10	2,4,6-Trichlorophenol
D043	1	Vinyl chloride