

Form RE-01 REQUIREMENTS: NESHAP - Source Categories & Accidental Release
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES & PREVENTION OF ACCIDENTAL RELEASE

(40 CFR 63; 40 CFR 68 and 1990 Clean Air Act, as amended, Section 112)

1) Please read through Table A (lists of 187 Hazardous Air Pollutants (HAP) - sorted alphabetically and by CAS number) and check one of the following:

- NO, my facility DOES NOT emit into the atmosphere or process, use, or generate materials that contain any pollutants listed in Table A and is not subject to these requirements for NESHAP. Go to question 5.
- YES, my facility DOES emit into the atmosphere or process, use, or generate materials that contain one or more of the air pollutants listed in Table A.

2) Major Source Determination:

a) Does your source have the potential to emit into the atmosphere¹ 10 tons per year or more of any single pollutant listed in Table A?

- NO, my facility DOES NOT have the potential to emit 10 tons per year or more of any single pollutant listed in Table A.
- YES, my facility DOES have the potential to emit 10 tons per year or more of at least one single pollutant listed in Table A and is therefore a major source of HAP emissions.

b) Does your source have the potential to emit 25 tons per year or more of any combination of air pollutants listed in Table A?

- NO, my facility DOES NOT have the potential to emit 25 tons per year or more of any combination of pollutants listed in Table A.
- YES, my facility DOES have the potential to emit 25 tons per year or more of any combination of pollutants listed in Table A and is therefore a major source of HAP emissions.

If you answered "no" to both questions 2a and 2b, go to question 4.

3) Does your source have any equipment that fits any of the major source categories listed in Table B-1 (Categories of Major Sources of Hazardous Air Pollutants)?

- NO, my facility DOES NOT have any equipment that fits any of the major source categories listed in Table B-1. Go to question 5.
- YES, my facility DOES have equipment that fits one or more of the major source categories listed in Table B-1. List all applicable categories, along with the associated subpart and the final date in the following table and then go to question 5.

Source Category	40 CFR 63 Subpart	Final Date

¹ Calculations of potential to emit (PTE) into the atmosphere may only incorporate reductions from controls or other operating limitations when they are established under federally enforceable permit conditions.

4) Does your source have any equipment that fits any of the area source categories listed in Table B-2 (Categories of Area Sources of Hazardous Air Pollutants)? The rules for these source categories may apply whether or not your facility is considered a *major* source for hazardous air pollutants. If your source has any equipment that belongs to any area source categories in Table B-2, please read Section 112 of the Clean Air Act Amendments of 1990 and 40 CFR 63 subparts to determine all applicable requirements.

- NO, my facility DOES NOT have any equipment that fits any of the area source categories listed in Table B-2.
- YES, my facility DOES have equipment that fits one or more of the area source categories listed in Table B-2. List all applicable categories, along with the associated subpart and the final date:

Source Category	40 CFR 63 Subpart	Final Date

5) At any given time, does the source produce, process, handle, store or use any of the substances listed in Table C (Accidental Release Prevention - Lists of regulated toxic and flammable substances and threshold quantities - sorted alphabetically and by CAS number) in quantities greater than the threshold quantity?

- NO. Skip to question 7.
- YES, read Section 112(r) of the Clean Air Act Amendments of 1990 and 40 CFR Part 68

6) After reviewing Section 112(r) of the Clean Air Act Amendments of 1990 and 40 CFR 68, is your source subject to Section 112(r) Prevention of Accidental Releases?

- NO, indicate reasons that you believe the source is not subject to these requirements (include 112(r) or rule references):

- YES, my facility is subject to Section 112(r) Prevention of Accidental Releases. Although not a part of your Title V Operating Permit, you are required to write a management plan for the prevention of accidental releases that covers hazard assessment, pollution prevention, and emergency response issues for your facility.

7) If you answered YES to any of questions 3, 4, or 6, read Section 112 of the Clean Air Act Amendments of 1990 and 40 CFR 63 and 40 CFR 68 to determine all applicable requirements. When you return to Form RE-00 REQUIREMENTS REVIEW, answer "YES" to question 1c.

8) Return to form RE-00 REQUIREMENTS REVIEW, question 1b.

**Table A-1
HAZARDOUS AIR POLLUTANTS - by alpha**

CAS Number	Chemical Name	VOC/PM
75-07-0	Acetaldehyde	VOC
60-35-5	Acetamide	VOC
75-05-8	Acetonitrile	VOC
98-86-2	Acetophenone	VOC
53-96-3	2-Acetylaminofluorene	VOC ¹
107-02-8	Acrolein	VOC
79-06-1	Acrylamide	VOC
79-10-7	Acrylic acid	VOC
107-13-1	Acrylonitrile	VOC
107-05-1	Allyl chloride	VOC
92-67-1	4-Aminobiphenyl	VOC ¹
62-53-3	Aniline	VOC
90-04-0	o-Anisidine	VOC
0	Antimony Compounds	PM
0	Arsenic Compounds	PM ²
1332-21-4	Asbestos (friable)	PM
71-43-2	Benzene	VOC
92-87-5	Benzidine	VOC ¹
98-07-7	Benzotrichloride	VOC
100-44-7	Benzyl chloride	VOC
0	Beryllium Compounds	PM
92-52-4	Biphenyl	VOC
542-88-1	Bis(chloromethyl) ether	VOC
75-25-2	Bromoform	VOC
106-99-0	1,3-Butadiene	VOC
0	Cadmium Compounds	PM
156-62-7	Calcium cyanamide	PM
133-06-2	Captan	VOC ¹
63-25-2	Carbaryl	VOC ¹
75-15-0	Carbon disulfide	VOC
56-23-5	Carbon tetrachloride	VOC
463-58-1	Carbonyl sulfide	VOC
120-80-9	Catechol	VOC
133-90-4	Chloramben	VOC ¹
57-74-9	Chlordane	VOC ¹
7782-50-5	Chlorine	
79-11-8	Chloroacetic acid	VOC
532-27-4	2-Chloroacetophenone	VOC
108-90-7	Chlorobenzene	VOC
510-15-6	Chlorobenzilate	VOC ¹
67-66-3	Chloroform	VOC
107-30-2	Chloromethyl methyl ether	VOC
126-99-8	Chloroprene (2-chloro-1,3-butadiene)	VOC
0	Chromium Compounds	PM
0	Cobalt Compounds	PM
0	Coke Oven Emissions	VOC/PM ³
1319-77-3	Cresol/Cresylic acid (mixed isomers)	VOC
108-39-4	m-Cresol	VOC
95-48-7	o-Cresol	VOC
106-44-5	p-Cresol	VOC
98-82-8	Cumene	VOC
0	Cyanide Compounds	PM ²
94-75-7	2,4-D (2,4-Dichlorophenoxyacetic Acid) (including salts and esters)	VOC ¹
72-55-9	DDE (1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene)	VOC ¹
117-81-7	Di(2-ethylhexyl) phthalate (DEHP)	VOC ¹
334-88-3	Diazomethane	VOC
132-64-9	Dibenzofuran	VOC ¹
96-12-8	1,2-Dibromo-3-chloropropane	VOC
84-74-2	Dibutyl phthalate	VOC ¹
106-46-7	1,4-Dichlorobenzene	VOC

CAS Number	Chemical Name	VOC/PM
91-94-1	3,3'-Dichlorobenzidine	VOC ¹
111-44-4	Dichloroethyl ether (Bis(2-chloroethyl) ether)	VOC
542-75-6	1,3-Dichloropropene	VOC
62-73-7	Dichlorvos	VOC
111-42-2	Diethanolamine	VOC
64-67-5	Diethyl sulfate	VOC
119-90-4	3,3'-Dimethoxybenzidine	VOC ¹
60-11-7	4-Dimethylaminoazobenzene	VOC ¹
121-69-7	N,N-Dimethylaniline	VOC
119-93-7	3,3'-Dimethylbenzidine	VOC ¹
79-44-7	Dimethylcarbamoyl chloride	VOC
68-12-2	Dimethylformamide	VOC
57-14-7	1,1-Dimethylhydrazine	VOC
131-11-3	Dimethyl phthalate	VOC
77-78-1	Dimethyl sulfate	VOC
534-52-1	4,6-Dinitro-o-cresol (including salts)	VOC ¹
51-28-5	2,4-Dinitrophenol	VOC ¹
121-14-2	2,4-Dinitrotoluene	VOC
123-91-1	1,4-Dioxane (1,4-Diethylene oxide)	VOC
122-66-7	1,2-Diphenylhydrazine	VOC
106-89-8	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	VOC
106-88-7	1,2-Epoxybutane (1,2-Butylene oxide)	VOC
140-88-5	Ethyl acrylate	VOC
100-41-4	Ethylbenzene	VOC
75-00-3	Ethyl chloride (Chloroethane)	VOC
106-93-4	Ethylene dibromide (Dibromoethane)	VOC
107-06-2	Ethylene dichloride (1,2-Dichloroethane)	VOC
107-21-1	Ethylene glycol	VOC
151-56-4	Ethyleneimine (Aziridine)	VOC
75-21-8	Ethylene oxide	VOC
96-45-7	Ethylene thiourea	VOC
75-34-3	Ethylidene dichloride (1,1-Dichloroethane)	VOC
0	Fine Mineral Fibers	PM
50-00-0	Formaldehyde	VOC
0	Glycol Ethers, except CAS #111-76-2, ethylene glycol mono-butyl ether, also known as EGBE or 2-Butoxyethanol	VOC
76-44-8	Heptachlor	VOC
118-74-1	Hexachlorobenzene	VOC
87-68-3	Hexachloro-1,3-butadiene	VOC
77-47-4	Hexachlorocyclopentadiene	VOC
67-72-1	Hexachloroethane	VOC
822-06-0	Hexamethylene-1,6-diisocyanate	VOC
680-31-9	Hexamethylphosphoramide	VOC
110-54-3	Hexane	VOC
302-01-2	Hydrazine	
7647-01-0	Hydrochloric acid (HCl)	
7664-39-3	Hydrogen fluoride (HF)	
123-31-9	Hydroquinone	VOC ¹
78-59-1	Isophorone	VOC
0	Lead Compounds	PM
58-89-9	Lindane (1,2,3,4,5,6-Hexachlorocyclohexane)	VOC ¹
108-31-6	Maleic anhydride	VOC ¹
0	Manganese Compounds	PM
0	Mercury Compounds	PM ²
67-56-1	Methanol	VOC
72-43-5	Methoxychlor	VOC ¹
74-83-9	Methyl bromide (Bromomethane)	VOC
74-87-3	Methyl chloride (Chloromethane)	VOC
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)	NR ⁴
60-34-4	Methylhydrazine	VOC
74-88-4	Methyl iodide (Iodomethane)	VOC

Table A-1 (continued)
HAZARDOUS AIR POLLUTANTS - by alpha

CAS Number	Chemical Name	VOC/PM
108-10-1	Methyl isobutyl ketone (MIBK) (Hexone)	VOC
624-83-9	Methyl isocyanate	VOC
80-62-6	Methyl methacrylate	VOC
1634-04-4	Methyl tert-butyl ether (MTBE)	VOC
101-14-4	4,4'-Methylenebis(2-chloroaniline)	VOC ¹
75-09-2	Methylene chloride (Dichloromethane)	NR ⁴
101-77-9	4,4'-Methylenedianiline	VOC ¹
101-68-8	4,4'-Methylenediphenyl diisocyanate (MDI)	VOC
91-20-3	Naphthalene	VOC
0	Nickel Compounds	PM
98-95-3	Nitrobenzene	VOC
92-93-3	4-Nitrobiphenyl	VOC ¹
100-02-7	4-Nitrophenol	VOC ¹
79-46-9	2-Nitropropane	VOC
62-75-9	N-Nitrosodimethylamine	VOC
684-93-5	N-Nitroso-N-methylurea	VOC
59-89-2	N-Nitrosomorpholine	VOC
56-38-2	Parathion	VOC ¹
82-68-8	Pentachloronitrobenzene (Quintobenzene)	VOC
87-86-5	Pentachlorophenol	VOC ¹
108-95-2	Phenol	VOC
106-50-3	p-Phenylenediamine	VOC ¹
75-44-5	Phosgene	VOC
7803-51-2	Phosphine	
7723-14-0	Phosphorus (yellow or white)	PM ²
85-44-9	Phthalic anhydride	VOC ¹
1336-36-3	Polychlorinated biphenyls (PCBs) (Aroclors)	VOC ¹
0	Polycyclic Organic Matter	VOC ¹
1120-71-4	1,3-Propane sultone	VOC
57-57-8	beta-Propiolactone	VOC
123-38-6	Propionaldehyde	VOC
114-26-1	Propoxur (Baygon)	VOC ¹
78-87-5	Propylene dichloride (1,2-Dichloropropane)	VOC
75-56-9	Propylene oxide	VOC

CAS Number	Chemical Name	VOC/PM
75-55-8	1,2-Propylenimine (2-Methylaziridine)	VOC
91-22-5	Quinoline	VOC
106-51-4	Quinone (p-Benzoquinone)	VOC
0	Radionuclides (including radon)	PM ²
0	Selenium Compounds	PM
100-42-5	Styrene	VOC
96-09-3	Styrene oxide	VOC
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	VOC ¹
79-34-5	1,1,2,2-Tetrachloroethane	VOC
127-18-4	Tetrachloroethylene (Perchloroethylene)	NR ⁴
7550-45-0	Titanium tetrachloride	
108-88-3	Toluene	VOC
95-80-7	2,4-Toluediamine (2,4-Diaminotoluene)	VOC ¹
584-84-9	2,4-Toluene diisocyanate	VOC
95-53-4	o-Toluidine	VOC
8001-35-2	Toxaphene (chlorinated camphene)	VOC ¹
120-82-1	1,2,4-Trichlorobenzene	VOC
79-00-5	1,1,2-Trichloroethane	VOC
79-01-6	Trichloroethylene	VOC
95-95-4	2,4,5-Trichlorophenol	VOC
88-06-2	2,4,6-Trichlorophenol	VOC
121-44-8	Triethylamine	VOC
1582-09-8	Trifluralin	VOC ¹
540-84-1	2,2,4-Trimethylpentane	VOC
51-79-6	Urethane (Ethyl carbamate)	VOC
108-05-4	Vinyl acetate	VOC
593-60-2	Vinyl bromide (Bromoethene)	VOC
75-01-4	Vinyl chloride (Chloroethene)	VOC
75-35-4	Vinylidene chloride (1,1-dichloroethylene)	VOC
1330-20-7	Xylenes (mixed isomers)	VOC
108-38-3	m-Xylene	VOC
95-47-6	o-Xylene	VOC
106-42-3	p-Xylene	VOC

Notes:

- 1 This compound is defined as a VOC (40 CFR 51.100), but has a low vapor pressure. Emissions may be measured as either VOC or PM, depending on the process generating the emissions, and the test method used to measure the emissions.
- 2 Compounds in this class may be emitted as PM or as inorganic vapors.
- 3 Compounds in this class may be emitted as PM or as VOC.
- 4 Not Reactive-these compounds have been determined to have negligible photochemical reactivity, and are not defined as VOC (40 CFR 51.100)

Table A-2
HAZARDOUS AIR POLLUTANTS - by CAS Number

CAS Number	Chemical Name	VOC/PM
0	Antimony Compounds	PM
0	Arsenic Compounds	PM ²
0	Beryllium Compounds	PM
0	Cadmium Compounds	PM
0	Chromium Compounds	PM
0	Cobalt Compounds	PM
0	Coke Oven Emissions	VOC/PM ³
0	Cyanide Compounds	PM ²
0	Fine Mineral Fibers	PM
0	Glycol Ethers, except CAS #111-76-2, ethylene glycol mono-butyl ether, also known as EGBE or 2-Butoxyethanol	VOC
0	Lead Compounds	PM
0	Manganese Compounds	PM
0	Mercury Compounds	PM ²
0	Nickel Compounds	PM
0	Polycyclic Organic Matter	VOC ¹
0	Radionuclides (including radon)	PM ²
0	Selenium Compounds	PM
50-00-0	Formaldehyde	VOC
51-28-5	2,4-Dinitrophenol	VOC ¹
51-79-6	Urethane (Ethyl carbamate)	VOC
53-96-3	2-Acetylaminofluorene	VOC ¹
56-23-5	Carbon tetrachloride	VOC
56-38-2	Parathion	VOC ¹
57-14-7	1,1-Dimethylhydrazine	VOC
57-57-8	beta-Propiolactone	VOC
57-74-9	Chlordane	VOC ¹
58-89-9	Lindane (1,2,3,4,5,6-Hexachlorocyclohexane)	VOC ¹
59-89-2	N-Nitrosomorpholine	VOC
60-11-7	4-Dimethylaminoazobenzene	VOC ¹
60-34-4	Methylhydrazine	VOC
60-35-5	Acetamide	VOC
62-53-3	Aniline	VOC
62-73-7	Dichlorvos	VOC
62-75-9	N-Nitrosodimethylamine	VOC
63-25-2	Carbaryl	VOC ¹
64-67-5	Diethyl sulfate	VOC
67-56-1	Methanol	VOC
67-66-3	Chloroform	VOC
67-72-1	Hexachloroethane	VOC
68-12-2	Dimethylformamide	VOC
71-43-2	Benzene	VOC
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)	NR ⁴
72-43-5	Methoxychlor	VOC ¹
72-55-9	DDE (1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene)	VOC ¹
74-83-9	Methyl bromide (Bromomethane)	VOC
74-87-3	Methyl chloride (Chloromethane)	VOC
74-88-4	Methyl iodide (Iodomethane)	VOC
75-00-3	Ethyl chloride (Chloroethane)	VOC
75-01-4	Vinyl chloride (Chloroethene)	VOC
75-05-8	Acetonitrile	VOC
75-07-0	Acetaldehyde	VOC
75-09-2	Methylene chloride (Dichloromethane)	NR ⁴
75-15-0	Carbon disulfide	VOC
75-21-8	Ethylene oxide	VOC
75-25-2	Bromoform	VOC
75-34-3	Ethylidene dichloride (1,1-Dichloroethane)	VOC
75-35-4	Vinylidene chloride (1,1-dichloroethylene)	VOC
75-44-5	Phosgene	VOC
75-55-8	1,2-Propylenimine (2-Methylaziridine)	VOC

CAS Number	Chemical Name	VOC/PM
75-56-9	Propylene oxide	VOC
76-44-8	Heptachlor	VOC
77-47-4	Hexachlorocyclopentadiene	VOC
77-78-1	Dimethyl sulfate	VOC
78-59-1	Isophorone	VOC
78-87-5	Propylene dichloride (1,2-Dichloropropane)	VOC
79-00-5	1,1,2-Trichloroethane	VOC
79-01-6	Trichloroethylene	VOC
79-06-1	Acrylamide	VOC
79-10-7	Acrylic acid	VOC
79-11-8	Chloroacetic acid	VOC
79-34-5	1,1,2,2-Tetrachloroethane	VOC
79-44-7	Dimethylcarbamoyl chloride	VOC
79-46-9	2-Nitropropane	VOC
80-62-6	Methyl methacrylate	VOC
82-68-8	Pentachloronitrobenzene (Quintobenzene)	VOC
84-74-2	Dibutyl phthalate	VOC ¹
85-44-9	Phthalic anhydride	VOC ¹
87-68-3	Hexachloro-1,3-butadiene	VOC
87-86-5	Pentachlorophenol	VOC ¹
88-06-2	2,4,6-Trichlorophenol	VOC
90-04-0	o-Anisidine	VOC
91-20-3	Naphthalene	VOC
91-22-5	Quinoline	VOC
91-94-1	3,3'-Dichlorobenzidine	VOC ¹
92-52-4	Biphenyl	VOC
92-67-1	4-Aminobiphenyl	VOC ¹
92-87-5	Benzidine	VOC ¹
92-93-3	4-Nitrobiphenyl	VOC ¹
94-75-7	2,4-D (2,4-Dichlorophenoxyacetic Acid) (including salts and esters)	VOC ¹
95-47-6	o-Xylene	VOC
95-48-7	o-Cresol	VOC
95-53-4	o-Toluidine	VOC
95-80-7	2,4-Toluenediamine (2,4-Diaminotoluene)	VOC ¹
95-95-4	2,4,5-Trichlorophenol	VOC
96-09-3	Styrene oxide	VOC
96-12-8	1,2-Dibromo-3-chloropropane	VOC
96-45-7	Ethylene thiourea	VOC
98-07-7	Benzotrithloride	VOC
98-82-8	Cumene	VOC
98-86-2	Acetophenone	VOC
98-95-3	Nitrobenzene	VOC
100-02-7	4-Nitrophenol	VOC ¹
100-41-4	Ethylbenzene	VOC
100-42-5	Styrene	VOC
100-44-7	Benzyl chloride	VOC
101-14-4	4,4'-Methylenebis(2-chloroaniline)	VOC ¹
101-68-8	4,4'-Methylenediphenyl diisocyanate (MDI)	VOC
101-77-9	4,4'-Methylenedianiline	VOC ¹
106-42-3	p-Xylene	VOC
106-44-5	p-Cresol	VOC
106-46-7	1,4-Dichlorobenzene	VOC
106-50-3	p-Phenylenediamine	VOC ¹
106-51-4	Quinone (p-Benzoquinone)	VOC
106-88-7	1,2-Epoxybutane (1,2-Butylene oxide)	VOC
106-89-8	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	VOC
106-93-4	Ethylene dibromide (Dibromoethane)	VOC
106-99-0	1,3-Butadiene	VOC
107-02-8	Acrolein	VOC
107-05-1	Allyl chloride	VOC
107-06-2	Ethylene dichloride (1,2-Dichloroethane)	VOC

Table A-2 (continued)
HAZARDOUS AIR POLLUTANTS - by CAS Number

CAS Number	Chemical Name	VOC/PM
107-13-1	Acrylonitrile	VOC
107-21-1	Ethylene glycol	VOC
107-30-2	Chloromethyl methyl ether	VOC
108-05-4	Vinyl acetate	VOC
108-10-1	Methyl isobutyl ketone (MIBK) (Hexone)	VOC
108-31-6	Maleic anhydride	VOC ¹
108-38-3	m-Xylene	VOC
108-39-4	m-Cresol	VOC
108-88-3	Toluene	VOC
108-90-7	Chlorobenzene	VOC
108-95-2	Phenol	VOC
110-54-3	Hexane	VOC
111-42-2	Diethanolamine	VOC
111-44-4	Dichloroethyl ether (Bis(2-chloroethyl) ether)	VOC
114-26-1	Propoxur (Baygon)	VOC ¹
117-81-7	Di(2-ethylhexyl) phthalate (DEHP)	VOC ¹
118-74-1	Hexachlorobenzene	VOC
119-90-4	3,3'-Dimethoxybenzidine	VOC ¹
119-93-7	3,3'-Dimethylbenzidine	VOC ¹
120-80-9	Catechol	VOC
120-82-1	1,2,4-Trichlorobenzene	VOC
121-14-2	2,4-Dinitrotoluene	VOC
121-44-8	Triethylamine	VOC
121-69-7	N,N-Dimethylaniline	VOC
122-66-7	1,2-Diphenylhydrazine	VOC
123-31-9	Hydroquinone	VOC ¹
123-38-6	Propionaldehyde	VOC
123-91-1	1,4-Dioxane (1,4-Diethylene oxide)	VOC
126-99-8	Chloroprene (2-chloro-1,3-butadiene)	VOC
127-18-4	Tetrachloroethylene (Perchloroethylene)	NR ⁴
131-11-3	Dimethyl phthalate	VOC
132-64-9	Dibenzofuran	VOC ¹
133-06-2	Captan	VOC ¹
133-90-4	Chloramben	VOC ¹

CAS Number	Chemical Name	VOC/PM
140-88-5	Ethyl acrylate	VOC
151-56-4	Ethyleneimine (Aziridine)	VOC
156-62-7	Calcium cyanamide	PM
302-01-2	Hydrazine	
334-88-3	Diazomethane	VOC
463-58-1	Carbonyl sulfide	VOC
510-15-6	Chlorobenzilate	VOC ¹
532-27-4	2-Chloroacetophenone	VOC
534-52-1	4,6-Dinitro-o-cresol (including salts)	VOC ¹
540-84-1	2,2,4-Trimethylpentane	VOC
542-75-6	1,3-Dichloropropene	VOC
542-88-1	Bis(chloromethyl) ether	VOC
584-84-9	2,4-Toluene diisocyanate	VOC
593-60-2	Vinyl bromide (Bromoethene)	VOC
624-83-9	Methyl isocyanate	VOC
680-31-9	Hexamethylphosphoramide	VOC
684-93-5	N-Nitroso-N-methylurea	VOC
822-06-0	Hexamethylene-1,6-diisocyanate	VOC
1120-71-4	1,3-Propane sultone	VOC
1319-77-3	Cresol/Cresylic acid (mixed isomers)	VOC
1330-20-7	Xylenes (mixed isomers)	VOC
1332-21-4	Asbestos (friable)	PM
1336-36-3	Polychlorinated biphenyls (PCBs) (Aroclors)	VOC ¹
1582-09-8	Trifluralin	VOC ¹
1634-04-4	Methyl tert-butyl ether (MTBE)	VOC
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	VOC ¹
7550-45-0	Titanium tetrachloride	
7647-01-0	Hydrochloric acid (HCl)	
7664-39-3	Hydrogen fluoride (HF)	
7723-14-0	Phosphorus (yellow or white)	PM ²
7782-50-5	Chlorine	
7803-51-2	Phosphine	
8001-35-2	Toxaphene (chlorinated camphene)	VOC ¹

Notes:

- 1 This compound is defined as a VOC (40 CFR 51.100), but has a low vapor pressure. Emissions may be measured as either VOC or PM, depending on the process generating the emissions, and the test method used to measure the emissions.
- 2 Compounds in this class may be emitted as PM or as inorganic vapors.
- 3 Compounds in this class may be emitted as PM or as VOC.
- 4 Not Reactive-these compounds have been determined to have negligible photochemical reactivity, and are not defined as VOC (40 CFR 51.100)

Table B-1
CATEGORIES OF MAJOR SOURCES OF HAZARDOUS AIR POLLUTANTS
SORTED BY INDUSTRY GROUP

INDUSTRY GROUP - Source Category ^a	40 CFR 63 Subpart	Final Date	Compliance Date ^b
<u>FUEL COMBUSTION</u>			
Engine Test Cells/Stands (Combined with Rocket Testing Facilities)	PPPPP	5/27/2003	See Rule
Electric Utility Steam Generating Units (Coal- and Oil-fired)	UUUUU	<i>Proposed</i> 3/16/2011	
Industrial, Commercial & Institutional Boilers and Process Heaters	DDDDD	3/21/2011	3/21/2014
Reciprocating Internal Combustion Engines (RICE)	ZZZZ	6/15/2004	See Rule
Stationary Combustion Turbines	YYYY	3/5/2004	3/5/2007
<u>NON-FERROUS METALS PROCESSING</u>			
Primary Aluminum Reduction Plants	LL	10/07/1997	10/07/1999
Primary Copper Smelting	QQQ	6/12/2002	6/12/2005
Primary Lead Smelting	TTT	6/4/1999	5/4/2001
Primary Magnesium Refining	TTTTT	10/10/2003	10/10/2004
Secondary Aluminum Production	RRR	3/23/2000	3/24/2003
Secondary Lead Smelting	X	6/23/1995	6/23/1997
<u>FERROUS METALS PROCESSING</u>			
Coke Oven Batteries	L	10/27/93	Variable
Coke Ovens: Pushing, Quenching, & Battery Stacks	CCCCC	4/14/2003	4/14/2006
Ferrous Alloys Production: Ferromanganese & Silicomanganese	XXX	5/20/1999	5/20/2001
Integrated Iron & Steel Manufacturing Facilities	FFFFF	5/20/2003	5/20/2006
Iron & Steel Foundries	EEEE	4/22/2004	4/22/2007
Steel Pickling: HCL Process Facilities & Hydrochloric Acid Regeneration Plants	CCC	6/22/1999	6/22/2001
<u>MINERAL PRODUCTS PROCESSING</u>			
Asphalt Processing & Asphalt Roofing Manufacturing	LLLLL	4/29/2003	5/1/2006
Brick & Structural Clay Products Manufacturing	JJJJ	5/16/2003	(vacated)
Clay Ceramics Manufacturing	KKKKK	5/16/2003	(vacated)
Lime Manufacturing Plants	AAAAA	1/5/2004	1/5/2007
Mineral Wool Production	DDD	6/01/1999	6/01/2002
Portland Cement Manufacturing Industry	LLL	6/14/1999	6/10/2002
Refractory Products Manufacturing (formerly Chromium Refractories)	SSSS	4/16/2003	4/17/2006
Taconite Iron Ore Processing	RRRRR	10/30/2003	10/30/2006
Wool Fiberglass Manufacturing	NNN	6/14/1999	6/14/2002
<u>PETROLEUM AND NATURAL GAS PRODUCTION AND REFINING</u>			
Natural Gas Transmission & Storage Facilities	HHH	06/17/99	06/17/02
Oil & Natural Gas Production Facilities	HH	06/17/99	06/17/02
Petroleum Refineries: Catalytic Cracking, Catalytic Reforming & Sulfur Recovery Units	UUU	4/11/2002	4/11/2005
Petroleum Refineries (Other Sources Not Distinctly Listed)	CC	08/18/95	08/18/98
<u>LIQUIDS DISTRIBUTION</u>			
Gasoline Distribution (Stage 1)	R	12/14/1994	12/15/1997
Marine Vessel Loading Operations	Y	9/19/1995	9/19/1998
Organic Liquids Distribution (non-gasoline)	EEEE	2/3/2004	2/3/2007
<u>SURFACE COATING PROCESSES</u>			
Aerospace Manufacturing and Rework Facilities	GG	9/1/1995	9/1/1998
Magnetic Tape Manufacturing Operations	EE	12/15/1994	12/15/1996
Paper and Other Web Coating	JJJ	12/4/2002	12/4/2005

INDUSTRY GROUP - Source Category ^a	40 CFR 63 Subpart	Final Date	Compliance Date ^b
Printing, Coating, and Dyeing of Fabrics and Other Textiles	OOOO	5/29/2003	5/29/2006
Printing and Publishing Industry	KK	5/30/1996	5/30/1999
Surface Coating of Automobiles and Light-Duty Trucks	III	4/26/2004	4/26/2007
Surface Coating of Large Appliances	NNNN	7/23/2002	7/23/2005
Surface Coating of Metal Cans	KKKK	11/13/2003	11/13/2006
Surface Coating of Metal Coil	SSSS	6/10/2002	6/10/2005
Surface Coating of Metal Furniture	RRRR	5/23/2003	5/23/2006
Surface Coating of Miscellaneous Metal Parts and Products (includes Asphalt/Coal Tar Application-metal pipes)	MMMM	1/2/2004	1/2/2007
Surface Coating of Plastic Parts and Products	PPPP	4/19/2004	4/19/2007
Surface Coating of Wood Building Products (formerly Flat Wood Paneling Products)	QQQQ	5/28/2003	5/28/2006
Shipbuilding & Ship Repair (Surface Coating)	II	12/15/1995	12/16/1996
Wood Furniture Manufacturing Operations	JJ	12/7/1995	11/21/1997
<u>WASTE TREATMENT AND DISPOSAL</u>			
Hazardous Waste Combustors	EEE	9/30/1999	9/30/2003
Municipal Solid Waste Landfills	AAAA	1/16/2003	See rule
Off-Site Waste Recovery Operations	DD	7/1/1996	2/1/2000
Publicly Owned Treatment Works (POTW)	VVV	10/26/1999	10/26/2002
Site Remediation	GGGGG	10/8/2003	10/8/2006
<u>AGRICULTURAL CHEMICALS PRODUCTION</u>			
Pesticide Active Ingredient Production	MMM	6/23/1999	12/23/2003
<ul style="list-style-type: none"> ▪ 4-Chloro-2-Methylphenoxyacetic Acid ▪ 2,4-D Salts & Esters ▪ 4,6-dinitro-o-cresol ▪ Butadiene Furfural Cotrimer (R-11) ^c ▪ Captafol ^c ▪ Captan ^c ▪ Chloroneb ▪ Chlorothalonil ^c ▪ Dacthal (tm) ^c ▪ Sodium Pentachlorophenate ▪ Tordon (tm) Acid ^c 			
<u>FIBERS PRODUCTION PROCESSES</u>			
Cellulose Products Manufacturing	UUUU	6/11/2002	6/11/2005
<ul style="list-style-type: none"> ▪ Cellulose Food Casing ▪ Rayon ▪ Cellulosic Sponge ▪ Cellophane 			
Cellulose Ethers Production			
<ul style="list-style-type: none"> ▪ Caroxymethylcellulose ▪ Methyl cellulose ▪ Cellulose Ethers 			
<u>FOOD AND AGRICULTURE PROCESSES</u>			
Manufacturing of Nutritional Yeast (formerly Bakers Yeast)	CCCC	5/21/2001	5/21/2004
Solvent Extraction for Vegetable Oil Production	GGGG	4/12/2001	4/12/2004
<u>PHARMACEUTICAL PRODUCTION PROCESSES</u>			
Pharmaceuticals Production ^c	GGG	9/21/1998	10/21/2002
<u>POLYMERS AND RESINS PRODUCTION</u>			
Flexible Polyurethane Foam Production	III	10/7/1998	10/08/2001
Polyether Polyols Production	PPP	6/1/1999	6/1/2002
Polymers & Resins I	U	9/5/1996	7/31/1997
<ul style="list-style-type: none"> ▪ Butyl Rubber ▪ Epichlorohydrin Elastomer 			

INDUSTRY GROUP - Source Category ^a	40 CFR 63 Subpart	Final Date	Compliance Date ^b
<ul style="list-style-type: none"> ▪ Ethylene Propylene Rubber ▪ Hypalon (tm) ^c ▪ Neoprene ▪ Nitrile Butadiene Rubber ▪ Polybutadiene Rubber ^c ▪ Polysulfide Rubber ^c ▪ Styrene Butadiene Rubber & Latex ^c 	W	3/8/1995	3/3/1998
Polymers & Resins II <ul style="list-style-type: none"> ▪ Epoxy Resin ▪ Non-Nylon Polyamides 	OOO	1/20/2000	1/20/2003
Polymers & Resins III <ul style="list-style-type: none"> ▪ Amino Resins ▪ Phenolic Resins 	JJJ	9/12/1996	7/31/1997
Polymers & Resins IV <ul style="list-style-type: none"> ▪ Acrylonitrile Butadiene Styrene Resin ▪ Methyl Methacrylate Acrylonitrile Butadiene Styrene Resin ^c ▪ Methyl Methacrylate Butadiene Styrene Resin ^c ▪ Polyethylene Terephthalate Resin ▪ Polystyrene Resin ▪ Styrene Acrylonitrile Resin ▪ Nitrile Resin 	J	7/10/2002	7/10/2005
<u>PRODUCTION OF INORGANIC CHEMICALS</u>			
Hydrochloric Acid Production (includes Fumed Silica)	NNNNN	4/17/2003	4/17/2006
Mercury Cell Chlor-Alkali Plants	IIII	12/19/2003	12/19/2006
Phosphoric Acid/Phosphate Fertilizer	AA/BB	6/10/1999	6/10/2002
<u>PRODUCTION OF INORGANIC & ORGANIC CHEMICALS</u>			
Generic MACT <ul style="list-style-type: none"> ▪ Acetal Resins ▪ Acrylic/Modacrylic Fibers ▪ Hydrogen Fluoride ▪ Polycarbonates Production ^c 	YY	6/29/1999	6/29/2002
Generic MACT + <ul style="list-style-type: none"> ▪ Carbon Black Production ▪ Cyanide Chemicals Manufacturing ▪ Ethylene Production ▪ Spandex Production 	YY	7/12/2002	7/12/2005
<u>PRODUCTION OF ORGANIC CHEMICALS</u>			
Hazardous Organic NESHAP (HON)	F,G,H,I	4/22/1994	5/12/1998
<ul style="list-style-type: none"> ▪ Synthetic Organic Chemical Manufacturing Industry (SOCMI) ▪ SOCMI-Process Vents, Storage Vessels, Transfer Operations, & Wastewater ▪ Equipment Leaks ▪ Certain Processes Subject to the Negotiated Regulation for Equipment Leaks ▪ Tetrahydrobenzaldehyde Manufacture (Formerly known as Butadiene Dimers Production) 	F		5/14/2001
	G		5/14/2001
	H		5/12/1999
	I		Variable
	F	05/12/1998	05/12/2001
Miscellaneous Organic Chemical Production & Processes (MON) <ul style="list-style-type: none"> ▪ Alkyd Resins ▪ Ammonium Sulfate ▪ Benzyltrimethylammonium Chloride ▪ Carbonyl Sulfide ▪ Chelating Agents ▪ Chlorinated Paraffins ^c ▪ Ethylidene Norbomene ^c ▪ Explosives ▪ Hydrazine ▪ Maleic Anhydride Copolymers ▪ Manufacture of Paints, Coatings, & Adhesives 	FFFF	11/10/2003	5/10/2008

INDUSTRY GROUP - Source Category ^a	40 CFR 63 Subpart	Final Date	Compliance Date ^b
<ul style="list-style-type: none"> ▪ OBPA/1,3-diisocyanate ^c ▪ Photographic Chemicals ▪ Phthalate Plasticizers ▪ Polyester Resins ▪ Polymerized Vinylidene Chloride ▪ Polymethyl Methacrylate Resins ▪ Polyvinyl Acetate Emulsions ▪ Polyvinyl Alcohol ▪ Polyvinyl Butyral ▪ Quaternary Ammonium Compounds ▪ Rubber Chemicals ▪ Symmetrical Tetrachloropyridine ^c 			
<u>MISCELLANEOUS PROCESSES</u>			
Boat Manufacturing	VVVV	8/22/2001	8/22/2004
Chromium Electroplating	N	1/25/1995	
<ul style="list-style-type: none"> ▪ Decorative Chromium Electroplating 			1/25/1996
<ul style="list-style-type: none"> ▪ Hard Chromium Electroplating 			1/25/1997
<ul style="list-style-type: none"> ▪ Chromic Acid Anodizing 			1/25/1997
Commercial Sterilizers	O	12/6/1994	12/6/1998
Degreasing Organic Cleaners (Halogenated Solvent Cleaning)	T	12/2/1994	12/2/1997
Dry Cleaning (Perchloroethylene)	M	9/22/1993	9/23/1996
<ul style="list-style-type: none"> ▪ Industrial Dry-to-dry Machines ▪ Industrial Transfer Machines ▪ Commercial Transfer Machines 			
Flexible Polyurethane Foam Fabrication	MMMMM	4/14/2003	4/14/2004
Friction Products Manufacturing	QQQQQ	10/18/2002	10/18/2005
Industrial Process Cooling Towers	Q	9/8/1994	3/8/1995
Leather Tanning & Finishing Operations	TTTTT	2/27/2002	2/27/2005
Miscellaneous Coating Manufacturing	HHHHH	12/11/2003	12/11/2006
Plywood and Composite Wood Products (formerly Plywood and Particle Board Manufacturing)	DDDD	7/30/2004	10/1/2007
Pulp & Paper (chemical) MACT I	S	4/15/1998	4/16/2001
Pulp & Paper (combustion) MACT II	MM	1/12/2001	See Rule
Pulp & Paper (mechanical) MACT III	S	4/15/1998	4/16/2001
Reinforced Plastics Composites Production	WWWW	4/21/2003	4/21/2006
Rubber Tire Manufacturing	XXXX	7/9/2002	7/11/2005
Semiconductor Production	BBBBB	5/22/2003	5/22/2006
Wet Formed Fiberglass Mat Production	HHHH	4/11/2002	4/11/2005

Notes:

^a Only major sources within any category shall be subject to emission standards under Section 112 unless a finding is made of a threat of adverse effects to human health or the environment for the area sources in a category. All listed categories are exclusive of any specific operations or processes included under other categories that are listed separately.

^b The compliance dates listed above are primarily for existing sources. New sources normally have to be in compliance at startup. For more information on the compliance date for a specific source category, refer to the individual subpart. Part 63 NESHAP subparts can be viewed on EPA's Air Toxics web page (<http://www.epa.gov/ttn/atw/mactfnlalp.html>).

^c Equipment handling specific chemicals for these categories or subsets of these categories are subject to a negotiated standard for equipment leaks contained in the HON, which was finalized on April 22, 1994. The specific processes affected within the categories are listed in 40 CFR 63 Subpart I.

Table B-2
CATEGORIES OF AREA SOURCES OF HAZARDOUS AIR POLLUTANTS

Source Category ^a	40 CFR 63 Subpart	Final Date ^g	Compliance Date ^b
Acrylic and Modacrylic Fibers Production ^c	LLLLLL	7/16/2007	1/16/2008
Aluminum, Copper, and Other Nonferrous Foundries ^c	ZZZZZZ	6/25/2009	6/27/2011
<ul style="list-style-type: none"> • Aluminum Foundries • Copper Foundries • Other Nonferrous Foundries 			
Asphalt Processing & Asphalt Roofing Manufacturing ^{c, e}	AAAAAAA	12/2/2009	12/2/2010
Brick & Structural Clay		12/16/2010	
Carbon Black Production ^d	MMMMMM	7/16/2007	7/16/2007
Chemical Manufacturing ^f	VVVVVV	10/29/2009	10/29/2012
<ul style="list-style-type: none"> • Agricultural Chemicals & Pesticides Manufacturing • Cyclic Crude & Intermediate Production • Industrial Inorganic Chemical Manufacturing • Industrial Organic Chemical Manufacturing • Inorganic Pigments Manufacturing • Miscellaneous Organic Chemical Manufacturing (MON) • Pharmaceutical Production • Plastic Materials and Resins Manufacturing • Synthetic Rubber Manufacturing 			
Chemical Manufacturing: Chromium Compounds ^d	NNNNNN	7/16/2007	1/16/2008
Chemical Preparations ^{c, e}	BBBBBBB	12/30/09	12/30/2010
Chromium Electroplating and Anodizing Tanks ^c	N	1/25/1995	
<ul style="list-style-type: none"> • Chromic Acid Anodizing • Hard Chromium Electroplating • Decorative Chromium Electroplating 			1/25/1997 1/25/1997 1/25/1996
Clay Ceramics Manufacturing ^c	RRRRRR	12/26/2007	12/26/2007
Commercial Sterilizers ^c	O	12/6/1994	12/6/1998
Dry Cleaning Facilities ^c	M	9/22/1993	9/23/1996
Electric Arc Furnaces Steel Facilities ^d	YYYYYY	12/28/2007	6/30/2008
Electric Utility Steam Generating Units (Coal- and Oil-fired)	UUUUU	3/16/2011	
Ferroalloys Production Facilities ^c	YYYYYY	12/23/2008	6/22/2009
Flexible Polyurethane Foam Production and Fabrication ^c	OOOOOO	7/16/2007	7/16/2008
<ul style="list-style-type: none"> • Flexible Polyurethane Foam Production • Flexible Polyurethane Foam Fabrication 			
Gasoline Distribution Stage I (Bulk Terminals, Bulk Plants, & Pipeline Facilities) ^c	BBBBBB	1/10/2008	1/10/2011
Gasoline Distribution Stage I (Dispensing Facilities) ^c	CCCCCC	1/10/2008	1/10/2011
Glass Manufacturing ^d	SSSSSS	12/26/2007	12/28/2009
Gold Mine Ore Processing and Production ^{d, e}	EEEEEEE	2/17/2011	2/17/2014
Halogenated Solvent Cleaners ^c	T	12/2/1994	12/2/1997
Hazardous Waste Incineration ^d	EEE	9/30/1999	9/30/2002
Hospital Sterilizers ^c	WWWWW	12/28/2007	12/29/2008
Industrial, Commercial, and Institutional Boilers ^c	JJJJJ	3/21/2011	See rule
Iron and Steel Foundries ^c	ZZZZZ	1/2/2008	See rule
<ul style="list-style-type: none"> • Iron Foundries • Steel Foundries 			
Lead Acid Battery Manufacturing ^c	PPPPP	7/16/2007	7/16/2008
Medical Waste Incinerators	(See 40 CFR 60 Subparts Ce and Ec)		

Source Category ^a	40 CFR 63 Subpart	Final Date ^g	Compliance Date ^b
Metal Fabrication and Finishing ^c <ul style="list-style-type: none"> • Electrical and Electronic Equipment Finishing Operations • Fabricated Metal Products • Fabricated Plate Work (Boiler Shops) • Fabricated Structural Metal Manufacturing • Heating Equipment, Except Electric • Industrial Machinery and Equipment Finishing Operations • Iron and Steel Forging • Primary Metal Products Manufacturing • Valves and Pipe Fittings 	XXXXXX	7/23/2008	7/25/2011
Mercury Cell Chlor-Alkali Plants ^d	IIII	12/19/2003	12/19/2006
Municipal Solid Waste Landfills	AAAA	1/16/2003	See rule
Municipal Waste Combustors	(See 40 CFR 60 Subparts Ea, Eb, and AAAA)		
Oil and Natural Gas Production ^c	HH	1/3/2007	See rule
Other Solid Waste Incineration	(See 40 CFR 60 Subpart EEEE)		
Paint Stripping and Miscellaneous Surface Coating ^c <ul style="list-style-type: none"> • Motor Vehicle and Mobile Equipment Surface Coating • Paint Stripping • Miscellaneous Surface Coating 	HHHHHH	1/9/2008	1/10/2011
Paints & Allied Products Manufacturing ^c	CCCCCC	12/3/2009	12/3/2012
Plating & Polishing ^c	WWWWW	7/1/2008	7/1/2010
Polyvinyl Chloride and Copolymers Production ^{c,e}	DDDDDD	1/23/2007	1/23/2007
Portland Cement Manufacturing ^d	LLL	6/14/1999	6/10/2002
Prepared Feeds Manufacturing ^c	DDDDDDDD	1/5/2010	1/5/2012
Primary Copper Smelting ^{d,e}	EEEEEE	1/23/2007	1/23/2007
Primary Nonferrous Metals - Zinc, Cadmium, and Beryllium ^{d,e}	GGGGGG	1/23/2007	1/23/2007
Publicly Owned Treatment Works ^c	VVV	10/26/1999	10/26/2002
Reciprocating Internal Combustion Engines ^c	ZZZZ	1/18/2008	See rule
Secondary Aluminum Production ^c	RRR	3/23/2000	3/24/2003
Secondary Copper Smelting ^{d,e}	FFFFFF	1/23/2007	1/23/2007
Secondary Lead Smelting ^d	X	6/23/1995	6/23/1997
Secondary Nonferrous Metals Processing ^c	TTTTTT	12/26/2007	12/26/2007
Sewage Sludge Incineration	(See 40 CFR 60 Subparts MMMM & LLLL)		
Wood Preserving ^c	QQQQQQ	7/16/2007	7/16/2007

Notes:

- ^a A finding of threat of adverse effects to human health or the environment was made for each category of area sources listed.
- ^b The compliance dates listed above are primarily for existing sources. New sources normally have to be in compliance at startup. For more information on the compliance date for a specific source category, refer to the individual subpart. Part 63 NESHAP subparts can be viewed on EPA's Air Toxics web page (<http://www.epa.gov/ttn/atw/area/compilation.html>).
- ^c If you own or operate an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.
- ^d If you own or operate an area source subject to this subpart, you must obtain a permit under 40 CFR part 70 or 40 CFR part 71.
- ^e The Department is not adopting this standard because Iowa does not have, and likely will not have, any affected facilities.
- ^f Any source that was a major source and installed a control device on a chemical manufacturing process unit (CMPU) after November 15, 1990, and, as a result, became an area source under 40 CFR part 63 is required to obtain a permit under 40 CFR part 70 or 40 CFR part 71. Otherwise, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart. On March 14, 2011, EPA stayed this requirement from March 14, 2011, until further notice.
- ^g *Tentative dates have been italicized.*

Table C-1
ACCIDENTAL RELEASE PREVENTION
LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES by alpha

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
107-02-8	Acrolein [2-Propenal]	5,000	b
107-13-1	Acrylonitrile [2-Propenenitrile]	20,000	b
814-68-6	Acrylyl chloride [2-Propenoyl chloride]	5,000	b
107-18-6	Allyl alcohol [2-Propen-1-ol]	15,000	b
107-11-9	Allylamine [2-Propen-1-amine]	10,000	b
7664-41-7	Ammonia (anhydrous)	10,000	a, b
7664-41-7	Ammonia (conc 20% or greater)	20,000	a, b
7784-34-1	Arsenous trichloride	15,000	b
7784-42-1	Arsine	1,000	b
10294-34-5	Boron trichloride [Borane, trichloro-]	5,000	b
7637-07-2	Boron trifluoride [Borane, trifluoro-]	5,000	b
353-42-4	Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[methane]]-, T-4-	15,000	b
7726-95-6	Bromine	10,000	a, b
75-15-0	Carbon disulfide	20,000	b
7782-50-5	Chlorine	2,500	a, b
10049-04-4	Chlorine dioxide [Chlorine oxide (ClO ₂)]	1,000	c
67-66-3	Chloroform [Methane, trichloro-]	20,000	b
542-88-1	Chloromethyl ether [Methane, oxybis[chloro-]	1,000	b
107-30-2	Chloromethyl methyl ether [Methane, chloromethoxy-]	5,000	b
4170-30-3	Crotonaldehyde [2-Butenal]	20,000	b
123-73-9	Crotonaldehyde, (E)- [2-Butenal, (E)-]	20,000	b
506-77-4	Cyanogen chloride	10,000	c
108-91-8	Cyclohexylamine [Cyclohexanamine]	15,000	b
19287-45-7	Diborane	2,500	b
75-78-5	Dimethyldichlorosilane [Silane, dichlorodimethyl-]	5,000	b
57-14-7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	15,000	b
106-89-8	Epichlorohydrin [Oxirane, (chloromethyl)-]	20,000	b
75-21-8	Ethylene oxide [Oxirane]	10,000	a, b
107-15-3	Ethylenediamine [1,2-Ethanediamine]	20,000	b
151-56-4	Ethyleneimine [Aziridine]	10,000	b
7782-41-4	Fluorine	1,000	b
50-00-0	Formaldehyde (solution)	15,000	b
110-00-9	Furan	5,000	b
302-01-2	Hydrazine	15,000	b
7647-01-0	Hydrochloric acid (conc 37% or greater)	15,000	d
74-90-8	Hydrocyanic acid	2,500	a, b
7647-01-0	Hydrogen chloride (anhydrous) [Hydrochloric acid]	5,000	a
7664-39-3	Hydrogen fluoride (conc 50% or greater) [Hydrofluoric acid]	1,000	a, b
7783-07-5	Hydrogen selenide	500	b
7783-06-4	Hydrogen sulfide	10,000	a, b
13463-40-6	Iron, pentacarbonyl- [Iron carbonyl (Fe(CO) ₅), (TB-5-11)-]	2,500	b

Table C-1 (continued)

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
78-82-0	Isobutyronitrile [Propanenitrile, 2-methyl-]	20,000	b
108-23-6	Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	15,000	b
126-98-7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	10,000	b
74-87-3	Methyl chloride [Methane, chloro-]	10,000	a
79-22-1	Methyl chloroformate [Carbonochloridic acid, methylester]	5,000	b
60-34-4	Methyl hydrazine [Hydrazine, methyl-]	15,000	b
624-83-9	Methyl isocyanate [Methane, isocyanato-]	10,000	a, b
74-93-1	Methyl mercaptan [Methanethiol]	10,000	b
556-64-9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	20,000	b
75-79-6	Methyltrichlorosilane [Silane, trichloromethyl-]	5,000	b
13463-39-3	Nickel carbonyl	1,000	b
7697-37-2	Nitric acid (conc 80% or greater)	15,000	b
10102-43-9	Nitric oxide [Nitrogen oxide (NO)]	10,000	b
8014-95-7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide] ¹	10,000	e
79-21-0	Peracetic acid [Ethaneperoxoic acid]	10,000	b
594-42-3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	10,000	b
75-44-5	Phosgene [Carbonic dichloride]	500	a, b
7803-51-2	Phosphine	5,000	b
10025-87-3	Phosphorus oxychloride [Phosphoryl chloride]	5,000	b
7719-12-2	Phosphorus trichloride	15,000	b
110-89-4	Piperidine	15,000	b
107-12-0	Propionitrile [Propanenitrile]	10,000	b
109-61-5	Propyl chloroformate [Carbonochloridic acid, propylester]	15,000	b
75-56-9	Propylene oxide [Oxirane, methyl-]	10,000	b
75-55-8	Propyleneimine [Aziridine, 2-methyl-]	10,000	b
7446-09-5	Sulfur dioxide (anhydrous)	5,000	a, b
7783-60-0	Sulfur tetrafluoride [Sulfur fluoride (SF ₄), (T-4)-]	2,500	b
7446-11-9	Sulfur trioxide	10,000	a, b
75-74-1	Tetramethyllead [Plumbane, tetramethyl-]	10,000	b
509-14-8	Tetranitromethane [Methane, tetranitro-]	10,000	b
7550-45-0	Titanium tetrachloride [Titanium chloride (TiCl ₄) (T-4)-]	2,500	b
584-84-9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-] ¹	10,000	a
91-08-7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-] ¹	10,000	a
26471-62-5	Toluene diisocyanate (unspecified isomer) [Benzene,1,3-diisocyanatomethyl-1] ¹	10,000	a
75-77-4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	10,000	b
108-05-4	Vinyl acetate monomer [Acetic acid ethenyl ester]	15,000	b

¹ The mixture exemption in 40 CFR 68.115(b)(1) does not apply to the substance.

Note: Basis for Listing:

- a Mandated for listing by Congress.
- b On EHS list, vapor pressure 10 mmHg or greater.
- c Toxic gas.
- d Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents.
- e Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents.

Table C-2
ACCIDENTAL RELEASE PREVENTION
LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD QUANTITIES by CAS Number

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
50-00-0	Formaldehyde (solution)	15,000	b
57-14-7	1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	15,000	b
60-34-4	Methyl hydrazine [Hydrazine, methyl-]	15,000	b
67-66-3	Chloroform [Methane, trichloro-]	20,000	b
74-87-3	Methyl chloride [Methane, chloro-]	10,000	a
74-90-8	Hydrocyanic acid	2,500	a, b
74-93-1	Methyl mercaptan [Methanethiol]	10,000	b
75-15-0	Carbon disulfide	20,000	b
75-21-8	Ethylene oxide [Oxirane]	10,000	a, b
75-44-5	Phosgene [Carbonic dichloride]	500	a, b
75-55-8	Propyleneimine [Aziridine, 2-methyl-]	10,000	b
75-56-9	Propylene oxide [Oxirane, methyl-]	10,000	b
75-74-1	Tetramethyllead [Plumbane, tetramethyl-]	10,000	b
75-77-4	Trimethylchlorosilane [Silane, chlorotrimethyl-]	10,000	b
75-78-5	Dimethyldichlorosilane [Silane, dichlorodimethyl-]	5,000	b
75-79-6	Methyltrichlorosilane [Silane, trichloromethyl-]	5,000	b
78-82-0	Isobutyronitrile [Propanenitrile, 2-methyl-]	20,000	b
79-21-0	Peracetic acid [Ethaneperoxoic acid]	10,000	b
79-22-1	Methyl chloroformate [Carbonochloridic acid, methylester]	5,000	b
91-08-7	Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-] ¹	10,000	a
106-89-8	Epichlorohydrin [Oxirane, (chloromethyl)-]	20,000	b
107-02-8	Acrolein [2-Propenal]	5,000	b
107-11-9	Allylamine [2-Propen-1-amine]	10,000	b
107-12-0	Propionitrile [Propanenitrile]	10,000	b
107-13-1	Acrylonitrile [2-Propenenitrile]	20,000	b
107-15-3	Ethylenediamine [1,2-Ethanediamine]	20,000	b
107-18-6	Allyl alcohol [2-Propen-1-ol]	15,000	b
107-30-2	Chloromethyl methyl ether [Methane, chloromethoxy-]	5,000	b
108-05-4	Vinyl acetate monomer [Acetic acid ethenyl ester]	15,000	b
108-23-6	Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	15,000	b
108-91-8	Cyclohexylamine [Cyclohexanamine]	15,000	b
109-61-5	Propyl chloroformate [Carbonochloridic acid, propylester]	15,000	b
110-00-9	Furan	5,000	b
110-89-4	Piperidine	15,000	b
123-73-9	Crotonaldehyde, (E)- [2-Butenal, (E)-]	20,000	b
126-98-7	Methacrylonitrile [2-Propenenitrile, 2-methyl-]	10,000	b
151-56-4	Ethyleneimine [Aziridine]	10,000	b
302-01-2	Hydrazine	15,000	b
353-42-4	Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxymethyl]ether], T-4-	15,000	b
506-77-4	Cyanogen chloride	10,000	c
509-14-8	Tetranitromethane [Methane, tetranitro-]	10,000	b

Table C-2 (continued)

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
542-88-1	Chloromethyl ether [Methane, oxybis[chloro-]	1,000	b
556-64-9	Methyl thiocyanate [Thiocyanic acid, methyl ester]	20,000	b
584-84-9	Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-] ¹	10,000	a
594-42-3	Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	10,000	b
624-83-9	Methyl isocyanate [Methane, isocyanato-]	10,000	a, b
814-68-6	Acrylyl chloride [2-Propenoyl chloride]	5,000	b
4170-30-3	Crotonaldehyde [2-Butenal]	20,000	b
7446-09-5	Sulfur dioxide (anhydrous)	5,000	a, b
7446-11-9	Sulfur trioxide	10,000	a, b
7550-45-0	Titanium tetrachloride [Titanium chloride (TiCl ₄) (T-4)-]	2,500	b
7637-07-2	Boron trifluoride [Borane, trifluoro-]	5,000	b
7647-01-0	Hydrochloric acid (conc 37% or greater)	15,000	d
7647-01-0	Hydrogen chloride (anhydrous) [Hydrochloric acid]	5,000	a
7664-39-3	Hydrogen fluoride (conc 50% or greater) [Hydrofluoric acid]	1,000	a, b
7664-41-7	Ammonia (anhydrous)	10,000	a, b
7664-41-7	Ammonia (conc 20% or greater)	20,000	a, b
7697-37-2	Nitric acid (conc 80% or greater)	15,000	b
7719-12-2	Phosphorus trichloride	15,000	b
7726-95-6	Bromine	10,000	a, b
7782-41-4	Fluorine	1,000	b
7782-50-5	Chlorine	2,500	a, b
7783-06-4	Hydrogen sulfide	10,000	a, b
7783-07-5	Hydrogen selenide	500	b
7783-60-0	Sulfur tetrafluoride [Sulfur fluoride (SF ₄), (T-4)-]	2,500	b
7784-34-1	Arsenous trichloride	15,000	b
7784-42-1	Arsine	1,000	b
7803-51-2	Phosphine	5,000	b
8014-95-7	Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide] ¹	10,000	e
10025-87-3	Phosphorus oxychloride [Phosphoryl chloride]	5,000	b
10049-04-4	Chlorine dioxide [Chlorine oxide (ClO ₂)]	1,000	c
10102-43-9	Nitric oxide [Nitrogen oxide (NO)]	10,000	b
10294-34-5	Boron trichloride [Borane, trichloro-]	5,000	b
13463-39-3	Nickel carbonyl	1,000	b
13463-40-6	Iron, pentacarbonyl- [Iron carbonyl (Fe(CO) ₅), (TB-5-11)-]	2,500	b
19287-45-7	Diborane	2,500	b
26471-62-5	Toluene diisocyanate (unspecified isomer) [Benzene,1,3-diisocyanatomethyl-1] ¹	10,000	a

¹ The mixture exemption in 40 CFR 68.115(b)(1) does not apply to the substance.

Note: Basis for Listing:

- a Mandated for listing by Congress.
- b On EHS list, vapor pressure 10 mmHg or greater.
- c Toxic gas.
- d Toxicity of hydrogen chloride, potential to release hydrogen chloride, and history of accidents.
- e Toxicity of sulfur trioxide and sulfuric acid, potential to release sulfur trioxide, and history of accidents.

Table C-3
ACCIDENTAL RELEASE PREVENTION
LIST OF REGULATED FLAMMABLE¹ SUBSTANCES AND THRESHOLD QUANTITIES by alpha

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
75-07-0	Acetaldehyde	10,000	g
74-86-2	Acetylene [Ethyne]	10,000	f
598-73-2	Bromotrifluoroethylene [Ethene, bromotrifluoro-]	10,000	f
106-99-0	1,3-Butadiene	10,000	f
106-97-8	Butane	10,000	f
25167-67-3	Butene	10,000	f
106-98-9	1-Butene	10,000	f
107-01-7	2-Butene	10,000	f
590-18-1	2-Butene-cis	10,000	f
624-64-6	2-Butene-trans [2-Butene, (E)]	10,000	f
463-58-1	Carbon oxysulfide [Carbon oxide sulfide (COS)]	10,000	f
7791-21-1	Chlorine monoxide [Chlorine oxide]	10,000	f
590-21-6	1-Chloropropylene [1-Propene, 1-chloro-]	10,000	g
557-98-2	2-Chloropropylene [1-Propene, 2-chloro-]	10,000	g
460-19-5	Cyanogen [Ethanedinitrile]	10,000	f
75-19-4	Cyclopropane	10,000	f
4109-96-0	Dichlorosilane [Silane, dichloro-]	10,000	f
75-37-6	Difluoroethane [Ethane, 1,1-difluoro-]	10,000	f
124-40-3	Dimethylamine [Methanamine, N-methyl-]	10,000	f
463-82-1	2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	10,000	f
74-84-0	Ethane	10,000	f
107-00-6	Ethyl acetylene [1-Butyne]	10,000	f
75-00-3	Ethyl chloride [Ethane, chloro-]	10,000	f
60-29-7	Ethyl ether [Ethane, 1,1'-oxybis-]	10,000	g
75-08-1	Ethyl mercaptan [Ethanethiol]	10,000	g
109-95-5	Ethyl nitrite [Nitrous acid, ethyl ester]	10,000	f
75-04-7	Ethylamine [Ethanamine]	10,000	f
74-85-1	Ethylene [Ethene]	10,000	f
1333-74-0	Hydrogen	10,000	f
75-28-5	Isobutane [Propane, 2-methyl-]	10,000	f
78-78-4	Isopentane [Butane, 2-methyl-]	10,000	g
78-79-5	Isoprene [1,3,-Butadiene, 2-methyl-]	10,000	g
75-29-6	Isopropyl chloride [Propane, 2-chloro-]	10,000	g
75-31-0	Isopropylamine [2-Propanamine]	10,000	g
74-82-8	Methane	10,000	f
74-89-5	Methylamine [Methanamine]	10,000	f
563-46-2	2-Methyl-1-butene	10,000	g
563-45-1	3-Methyl-1-butene	10,000	f
115-10-6	Methyl ether [Methane, oxybis-]	10,000	f
107-31-3	Methyl formate [Formic acid, methyl ester]	10,000	g
115-11-7	2-Methylpropene [1-Propene, 2-methyl-]	10,000	f
504-60-9	1,3-Pentadiene	10,000	f

Table C-3 (continued)

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
109-66-0	Pentane	10,000	g
109-67-1	1-Pentene	10,000	g
646-04-8	2-Pentene, (E)-	10,000	g
627-20-3	2-Pentene, (Z)-	10,000	g
463-49-0	Propadiene [1,2-Propadiene]	10,000	f
74-98-6	Propane	10,000	f
115-07-1	Propylene [1-Propene]	10,000	f
74-99-7	Propyne [1-Propyne]	10,000	f
7803-62-5	Silane	10,000	f
116-14-3	Tetrafluoroethylene [Ethene, tetrafluoro-]	10,000	f
75-76-3	Tetramethylsilane [Silane, tetramethyl-]	10,000	g
10025-78-2	Trichlorosilane [Silane, trichloro-]	10,000	g
79-38-9	Trifluorochloroethylene [Ethene, chlorotrifluoro-]	10,000	f
75-50-3	Trimethylamine [Methanamine, N,N-dimethyl-]	10,000	f
689-97-4	Vinyl acetylene [1-Buten-3-yne]	10,000	f
75-01-4	Vinyl chloride [Ethene, chloro-]	10,000	a,f
109-92-2	Vinyl ethyl ether [Ethene, ethoxy-]	10,000	g
75-02-5	Vinyl fluoride [Ethene, fluoro-]	10,000	f
107-25-5	Vinyl methyl ether [Ethene, methoxy-]	10,000	f
75-35-4	Vinylidene chloride [Ethene, 1,1-dichloro-]	10,000	g
75-38-7	Vinylidene fluoride [Ethene, 1,1-difluoro-]	10,000	f

¹ A flammable substance when used as a fuel or held for sale as a fuel at a retail facility is excluded from all provisions of this part (see 40 CFR 68.126).

Note: Basis for Listing:

- a Mandated for listing by Congress.
- f Flammable gas.
- g Volatile flammable liquid.

Table C-4
ACCIDENTAL RELEASE PREVENTION
LIST OF REGULATED FLAMMABLE¹ SUBSTANCES AND THRESHOLD QUANTITIES by CAS Number

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
60-29-7	Ethyl ether [Ethane, 1,1'-oxybis-]	10,000	g
74-82-8	Methane	10,000	f
74-84-0	Ethane	10,000	f
74-85-1	Ethylene [Ethene]	10,000	f
74-86-2	Acetylene [Ethyne]	10,000	f
74-89-5	Methylamine [Methanamine]	10,000	f
74-98-6	Propane	10,000	f
74-99-7	Propyne [1-Propyne]	10,000	f
75-00-3	Ethyl chloride [Ethane, chloro-]	10,000	f
75-01-4	Vinyl chloride [Ethene, chloro-]	10,000	a,f
75-02-5	Vinyl fluoride [Ethene, fluoro-]	10,000	f
75-04-7	Ethylamine [Ethanamine]	10,000	f
75-07-0	Acetaldehyde	10,000	g
75-08-1	Ethyl mercaptan [Ethanethiol]	10,000	g
75-19-4	Cyclopropane	10,000	f
75-28-5	Isobutane [Propane, 2-methyl-]	10,000	f
75-29-6	Isopropyl chloride [Propane, 2-chloro-]	10,000	g
75-31-0	Isopropylamine [2-Propanamine]	10,000	g
75-35-4	Vinylidene chloride [Ethene, 1,1-dichloro-]	10,000	g
75-37-6	Difluoroethane [Ethane, 1,1-difluoro-]	10,000	f
75-38-7	Vinylidene fluoride [Ethene, 1,1-difluoro-]	10,000	f
75-50-3	Trimethylamine [Methanamine, N,N-dimethyl-]	10,000	f
75-76-3	Tetramethylsilane [Silane, tetramethyl-]	10,000	g
78-78-4	Isopentane [Butane, 2-methyl-]	10,000	g
78-79-5	Isoprene [1,3,-Butadiene, 2-methyl-]	10,000	g
79-38-9	Trifluorochloroethylene [Ethene, chlorotrifluoro-]	10,000	f
106-97-8	Butane	10,000	f
106-98-9	1-Butene	10,000	f
106-99-0	1,3-Butadiene	10,000	f
107-00-6	Ethyl acetylene [1-Butyne]	10,000	f
107-01-7	2-Butene	10,000	f
107-25-5	Vinyl methyl ether [Ethene, methoxy-]	10,000	f
107-31-3	Methyl formate [Formic acid, methyl ester]	10,000	g
109-66-0	Pentane	10,000	g
109-67-1	1-Pentene	10,000	g
109-92-2	Vinyl ethyl ether [Ethene, ethoxy-]	10,000	g
109-95-5	Ethyl nitrite [Nitrous acid, ethyl ester]	10,000	f
115-07-1	Propylene [1-Propene]	10,000	f
115-10-6	Methyl ether [Methane, oxybis-]	10,000	f
115-11-7	2-Methylpropene [1-Propene, 2-methyl-]	10,000	f
116-14-3	Tetrafluoroethylene [Ethene, tetrafluoro-]	10,000	f
124-40-3	Dimethylamine [Methanamine, N-methyl-]	10,000	f

Table C-4 (continued)

CAS No.	Chemical name	Threshold quantity (lbs)	Basis for listing
460-19-5	Cyanogen [Ethanedinitrile]	10,000	f
463-49-0	Propadiene [1,2-Propadiene]	10,000	f
463-58-1	Carbon oxysulfide [Carbon oxide sulfide (COS)]	10,000	f
463-82-1	2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	10,000	f
504-60-9	1,3-Pentadiene	10,000	f
557-98-2	2-Chloropropylene [1-Propene, 2-chloro-]	10,000	g
563-45-1	3-Methyl-1-butene	10,000	f
563-46-2	2-Methyl-1-butene	10,000	g
590-18-1	2-Butene-cis	10,000	f
590-21-6	1-Chloropropylene [1-Propene, 1-chloro-]	10,000	g
598-73-2	Bromotrifluorethylene [Ethene, bromotrifluoro-]	10,000	f
624-64-6	2-Butene-trans [2-Butene, (E)]	10,000	f
627-20-3	2-Pentene, (Z)-	10,000	g
646-04-8	2-Pentene, (E)-	10,000	g
689-97-4	Vinyl acetylene [1-Buten-3-yne]	10,000	f
1333-74-0	Hydrogen	10,000	f
4109-96-0	Dichlorosilane [Silane, dichloro-]	10,000	f
7791-21-1	Chlorine monoxide [Chlorine oxide]	10,000	f
7803-62-5	Silane	10,000	f
10025-78-2	Trichlorosilane [Silane,trichloro-]	10,000	g
25167-67-3	Butene	10,000	f

¹ A flammable substance when used as a fuel or held for sale as a fuel at a retail facility is excluded from all provisions of this part (see 40 CFR 68.126).

Note: Basis for Listing:

- a Mandated for listing by Congress.
- f Flammable gas.
- g Volatile flammable liquid.