



# Minnesota Pollution Control Agency

AIR QUALITY  
520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **CAP-GI-09G**  
**REQUIREMENTS: RISK**  
**MANAGEMENT PROGRAMS FOR**  
**CHEMICAL ACCIDENTAL**  
**RELEASE PREVENTION**  
**(40 CFR pt. 68)**

10/7/04

If you produce, process, store or use any of the substances, in excess of the threshold listed in the following table, you may be subject to the requirements under Section 112(r) of the Clean Air Act. After reviewing Table G, return to form **CAP-GI-09 Requirements** and answer question 4b.

For more information on accidental release requirements go to: <http://www.pca.state.mn.us/air/accidental.html>

**TABLE G**  
**LIST OF REGULATED TOXIC SUBSTANCES AND THRESHOLD**  
**QUANTITIES FOR ACCIDENTAL RELEASE PREVENTION**

Chemical Name	CAS No.	Threshold Quantity (lbs)
Acetaldehyde	75-07-0	10,000
Acetylene [Ethyne]	74-86-2	10,000
Acrolein [2-Propenal]	107-02-8	5,000
Acrylonitrile [2-Propenenitrile]	107-13-1	20,000
Acrylyl chloride [2-Propenoyl chloride]	814-68-6	5,000
Allyl alcohol [2-Propen-1-ol]	107-18-6	15,000
Allylamine [2-Propen-1-amine]	107-11-9	10,000
Ammonia (anhydrous)	7664-41-7	10,000
Ammonia (conc 20% or greater)	7664-41-7	20,000
Arsenous trichloride	7784-34-1	15,000
Arsine	7784-42-1	1,000
Boron trichloride [Borane, trichloro-]	10294-34-5	5,000
Boron trifluoride [Borane, trifluoro-]	7637-07-2	5,000
Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[metane]]-, T-4-	353-42-4	15,000
Bromine	7726-95-6	10,000
Bromotrifluoroethylene [Ethene, bromotrifluoro-]	598-73-2	10,000
1,3-Butadiene	106-99-0	10,000
Butane	106-97-8	10,000
1-Butene	106-98-9	10,000
2-Butene	107-01-7	10,000
Butene	25167-67-3	10,000
2-Butene- <i>cis</i>	590-18-1	10,000
2-Butene- <i>trans</i> [2-Butene, (E)]	624-64-6	10,000
Carbon disulfide	75-15-0	20,000
Carbon oxysulfide [Carbon oxide sulfide (COS)]	463-58-1	10,000
Chlorine	7782-50-5	2,500
Chlorine dioxide [Chlorine oxide (ClO <sub>2</sub> )]	10049-04-4	1,000
Chlorine monoxide [Chlorine oxide]	7791-21-1	10,000
Chloroform [Methane, trichloro-]	67-66-3	20,000
Chloromethyl ether [Methane, oxybis[chloro-]	542-88-1	1,000
Chloromethyl methyl ether [Methane, chloromethoxy-]	107-30-2	5,000
2-Chloropropylene [1-Propene, 2-chloro-]	557-98-2	10,000
1-Chloropropylene [1-Propene, 1-chloro-]	590-21-6	10,000

TABLE G (Continued)

Chemical Name	CAS No.	Threshold Quantity (lbs)
Crotonaldehyde [2-Butenal]	4170-30-3	20,000
Crotonaldehyde, (E)- [2-Butenal, (E)-]	123-73-9	20,000
Cyanogen [Ethanedinitrile]	460-19-5	10,000
Cyanogen chloride	506-77-4	10,000
Cyclohexylamine [Cyclohexanamine]	108-91-8	15,000
Cyclopropane	75-19-4	10,000
Diborane	19287-45-7	2,500
Dichlorosilane [Silane, dichloro-]	4109-96-0	10,000
Difluoroethane [Ethane, 1,1-difluoro-]	75-37-6	10,000
Dimethyldichlorosilane [Silane, dichlorodimethyl-]	75-78-5	5,000
1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]	57-14-7	15,000
Dimethylamine [Methanamine, N-methyl-]	124-40-3	10,000
2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	463-82-1	10,000
Epichlorohydrin [Oxirane, (chloromethyl)-]	106-89-8	20,000
Ethane	74-84-0	10,000
Ethyl acetylene [1-Butyne]	107-00-6	10,000
Ethylamine [Ethanamine]	75-04-7	10,000
Ethyl chloride [Ethane, chloro-]	75-00-3	10,000
Ethylene [Ethene]	74-85-1	10,000
Ethylenediamine [1,2-Ethanediamine]	107-15-3	20,000
Ethyleneimine [Aziridine]	151-56-4	10,000
Ethylene oxide [Oxirane]	75-21-8	10,000
Ethyl ether [Ethane, 1,1'-oxybis-]	60-29-7	10,000
Ethyl mercaptan [Ethanethiol]	75-08-1	10,000
Ethyl nitrite [Nitrous acid, ethyl ester]	109-95-5	10,000
Fluorine	7782-41-4	1,000
Formaldehyde (solution)	50-00-0	15,000
Furan	110-00-9	5,000
Hydrazine	302-01-2	15,000
Hydrochloric acid (conc 30% or greater)	7647-01-0	15,000
Hydrocyanic acid	74-90-8	2,500
Hydrogen	1333-74-0	10,000
Hydrogen chloride (anhydrous) [Hydrochloric acid]	7647-01-0	5,000
Hydrogen fluoride/Hydrofluoric acid (conc 50% or greater) [Hydrofluoric acid]	7664-39-3	1,000
Hydrogen selenide	7783-07-5	500
Hydrogen sulfide	7783-06-4	10,000
Iron, pentacarbonyl- [Iron carbonyl (Fe(CO) <sub>5</sub> ), (TB-5-11)-]	13463-40-6	2,500
Isobutane [Propane, 2-methyl]	75-28-5	10,000
Isobutyronitrile [Propanenitrile, 2-methyl-]	78-82-0	20,000
Isopentane [Butane, 2-methyl-]	78-78-4	10,000
Isoprene [1,3-Butadiene, 2-methyl-]	78-79-5	10,000
Isopropylamine [2-Propanamine]	75-31-0	10,000
Isopropyl chloride [Propane, 2-chloro-]	75-29-6	10,000
Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	108-23-6	15,000
Methacrylonitrile [2-Propenenitrile, 2-methyl-]	126-98-7	10,000

TABLE G (Continued)

Chemical Name	CAS No.	Threshold Quantity (lbs)
Methane	74-82-8	10,000
Methylamine [Methanamine]	74-89-5	10,000
3-Methyl-1-butene	563-45-1	10,000
2-Methyl-1-butene	563-46-2	10,000
Methyl chloride [Methane, chloro-]	74-87-3	10,000
Methyl chloroformate [Carbonochloridic acid, methylester]	79-22-1	5,000
Methyl ether [Methane, oxybis-]	115-10-6	10,000
Methyl formate [Formic acid, methyl ester]	107-31-3	10,000
Methyl hydrazine [Hydrazine, methyl-]	60-34-4	15,000
Methyl isocyanate [Methane, isocyanato-]	624-83-9	10,000
Methyl mercaptan [Methanethiol]	74-93-1	10,000
2-Methylpropene [1-Propene, 2-methyl-]	115-11-7	10,000
Methyl thiocyanate [Thiocyanic acid, methyl ester]	556-64-9	20,000
Methyltrichlorosilane [Silane, trichloromethyl-]	75-79-6	5,000
Nickel carbonyl	13463-39-3	1,000
Nitric acid (conc 80% or greater)	7697-37-2	15,000
Nitric oxide [Nitrogen oxide (NO)]	10102-43-9	10,000
Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide]	8014-95-7	10,000
1,3-Pentadiene	504-60-9	10,000
Pentane	109-66-0	10,000
1-Pentene	109-67-1	10,000
2-Pentene, (E)-	646-04-8	10,000
2-Pentene, (Z)-	627-20-3	10,000
Peracetic acid [Ethaneperoxoic acid]	79-21-0	10,000
Perchloromethylmercaptan [Methanesulphenyl chloride, trichloro-]	594-42-3	10,000
Phosgene [Carbonic dichloride]	75-44-5	500
Phosphine	7803-51-2	5,000
Phosphorus oxychloride [Phosphoryl chloride]	10025-87-3	5,000
Phosphorus trichloride [Phosphorous trichloride]	7719-12-2	15,000
Piperidine	110-89-4	15,000
Propadiene [1,2-Propadiene]	463-49-0	10,000
Propane	74-98-6	10,000
Propionitrile [Propanenitrile]	107-12-0	10,000
Propyl chloroformate [Carbonochloridic acid, propylester]	109-61-5	15,000
Propylene [1-Propene]	115-07-1	10,000
Propyleneimine [Aziridine, 2-methyl-]	75-55-8	10,000
Propylene oxide [Oxirane, methyl-]	75-56-9	10,000
Propyne [1-Propyne]	74-99-7	10,000
Silane	7803-62-5	10,000
Sulfur dioxide (anhydrous)	7446-09-5	5,000
Sulfur tetrafluoride [Sulfur fluoride (SF <sub>4</sub> ), (T-4)-]	7783-60-0	2,500
Sulfur trioxide	7446-11-9	10,000
Tetrafluoroethylene [Ethene, tetrafluoro-]	116-14-3	10,000
Tetramethyl lead [Plumbene, tetramethyl-]	75-74-1	10,000
Tetramethylsilane [Silane, tetramethyl-]	75-76-3	10,000
Tetranitromethane [methane, tetranitro-]	509-14-8	10,000

**TABLE G (Continued)**

<b>Chemical Name</b>	<b>CAS No.</b>	<b>Threshold Quantity (lbs)</b>
Titanium tetrachloride [Titanium chloride (TiCl <sub>4</sub> ) (T-4)-]	7550-45-0	2,500
Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-]	584-84-9	10,000
Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-]	91-08-7	10,000
Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-]	26471-62-5	10,000
Trichlorosilane [Silane, trichloro-]	10025-78-2	10,000
Trifluorochloroethylene [Ethene, chlorotrifluoro-]	79-38-9	10,000
Trimethylamine [Methanamine, N,N-dimethyl-]	75-50-3	10,000
Trimethylchlorosilane [Silane, chlorotrimethyl-]	75-77-4	10,000
Vinyl acetate monomer [Acetic acid ethenyl ester]	108-05-4	15,000
Vinyl acetylene [1-Buten-3-yne]	689-97-4	10,000
Vinyl chloride [Ethene, chloro-]	75-01-4	10,000
Vinyl ethyl ether [Ethene, ethoxy-]	109-92-2	10,000
Vinyl fluoride [Ethene, fluoro-]	75-02-5	10,000
Vinylidene chloride [Ethene, 1,1-dichloro-]	75-35-4	10,000
Vinylidene fluoride [Ethene, 1,1-difluoro-]	75-38-7	10,000
Vinyl methyl ether [Ethene, methoxy-]	107-25-5	10,000