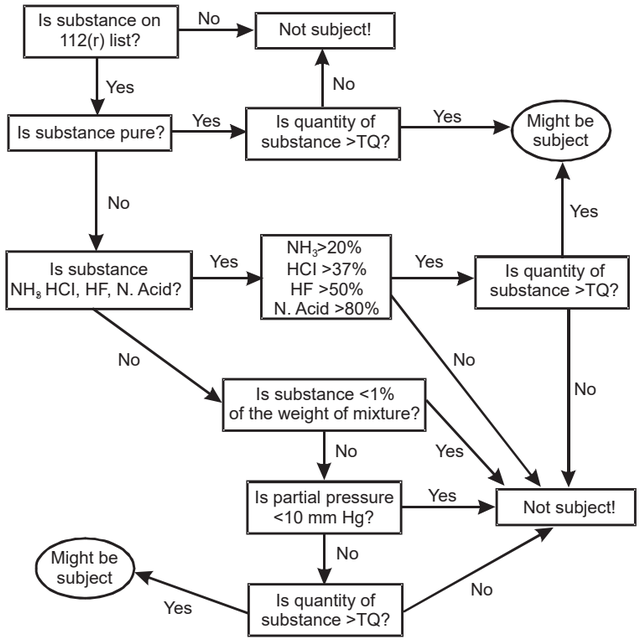
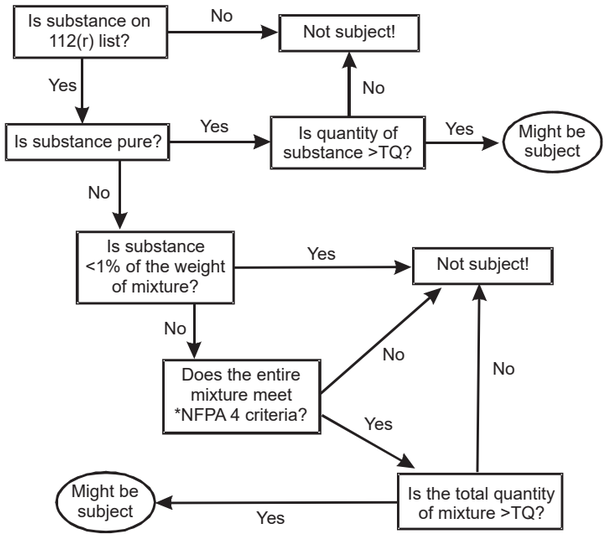
Threshold Determination: *Toxics*



Threshold Determination: *Flammables*



NFPA + National Fire Protection Association 704 Hazard Material Identification

Flammability Rating 4 = Materials which will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or which are readily dispersed in the air, and which will burn readily. Any liquid or gaseous material which is a liquid while under pressure and having a flash point below 73° F and a boiling point below 100° F (Class IA Flammable Liquids).

North Carolina- Department of Environment and Natural Resources
Division of Air Quality - Regional Offices and Local Programs

Winston-Salem Regional Office
450 West Hanes Road, Suite 300
Winston-Salem, NC 27105
Tele: (336) 776-9800
Fax: (336) 776-9797

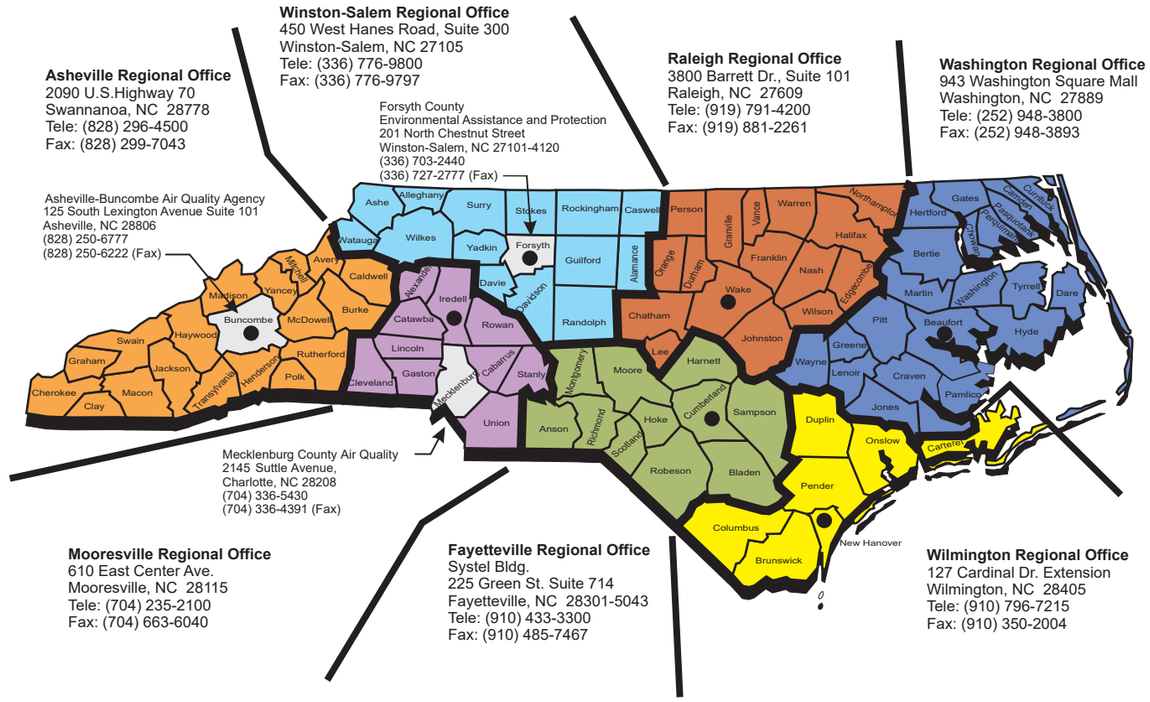
Asheville Regional Office
2090 U.S.Highway 70
Swannanoa, NC 28778
Tele: (828) 296-4500
Fax: (828) 299-7043

Forsyth County
Environmental Assistance and Protection
201 North Chestnut Street
Winston-Salem, NC 27101-4120
(336) 703-2440
(336) 727-2777 (Fax)

Asheville-Buncombe Air Quality Agency
125 South Lexington Avenue Suite 101
Asheville, NC 28806
(828) 250-6777
(828) 250-6222 (Fax)

Raleigh Regional Office
3800 Barrett Dr., Suite 101
Raleigh, NC 27609
Tele: (919) 791-4200
Fax: (919) 881-2261

Washington Regional Office
943 Washington Square Mall
Washington, NC 27889
Tele: (252) 948-3800
Fax: (252) 948-3893



Mecklenburg County Air Quality
2145 Suttle Avenue,
Charlotte, NC 28208
(704) 336-5430
(704) 336-4391 (Fax)

Mooresville Regional Office
610 East Center Ave.
Mooresville, NC 28115
Tele: (704) 235-2100
Fax: (704) 663-6040

Fayetteville Regional Office
Systel Bldg.
225 Green St. Suite 714
Fayetteville, NC 28301-5043
Tele: (910) 433-3300
Fax: (910) 485-7467

Wilmington Regional Office
127 Cardinal Dr. Extension
Wilmington, NC 28405
Tele: (910) 796-7215
Fax: (910) 350-2004

NOTE: Not To Scale
● Denotes Regional Office Location

For More Information

Contact the N.C. Chemical Accident Prevention Program
North Carolina Division of Air Quality (919) 707-8400
Website: www.ncair.org
Program Coordinator: (919) 707-8443
Website: deq.nc.gov/112r

Federal Contacts

EPA Emergency Management
https://www.epa.gov/emergency-response
(202) 564-8600

The Risk Management Plan (RMP) Reporting Center
RMPRC@epacdx.net
(703) 227-7650

Emergency Planning and Community Right-to-Know Act (EPCRA) Information Center
https://www.epa.gov/aboutepa/epa-hotlines
(800) 424-9346

In Case of Chemical Release

- Call 911 if you do not have an emergency response team onsite or if release requires outside assistance
- Report incident to regulatory agencies, Local Emergency Planning Committee

Emergency Contacts

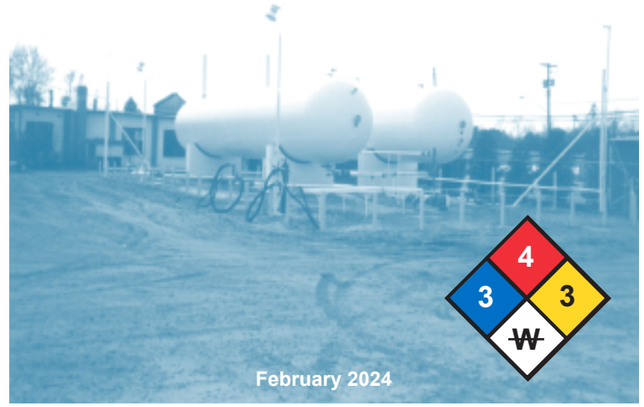
- Your Local Emergency Planning Committee
- State EOC (Emergency Hazardous Materials Calls) (800) 858-0368
- National Response Center (800) 424-8802

Do you need a RMP?

Chemical Accident Prevention in North Carolina

Section 112(r) of the Clean Air Act

NORTH CAROLINA
Department of Environmental Quality
Air Quality



Background

We all benefit from facilities that produce goods and services that we need. Some facilities must use hazardous chemicals in order to provide these goods and services. If mismanaged, some of these hazardous chemicals can be released into the air, posing a potential danger to employees, the public and the environment. The intent of Section 112(r) of the 1990 Amendment to the Clean Air Act is to build on existing health and safety programs by:

- **Protecting** plant personnel, the public and the environment.
- **Preventing** accidental chemical releases from occurring.
- **Predicting** the areas that would be impacted by a worst-case accidental release.
- **Preparing** plans for handling accidental chemical releases.
- **Providing** chemical hazard information, potential off-site consequences, and accidental release prevention information to the public.

Risk Management Program

The Environmental Protection Agency's (EPA) regulation for implementing Section 112(r) are promulgated at 40 CFR part 68 "Chemical Accident Prevention Provisions." 40 CFR part 68 was adopted by reference in the North Carolina Administrative Code at 15A NCAC 2D .2100 "Risk Management Program."

There are 77 acutely toxic substances and 63 flammable gases and volatile liquids that are identified in the regulation. Stationary sources (facilities) that have more than a threshold quantity (TQ) of a regulated substance in a single process must develop a risk management program that includes a hazard assessment, an accident prevention program and an emergency response program. They also must submit a risk management plan (RMP) to EPA. Please refer to the attached chart and listing of regulated substances for more detail.

112(r) Regulated Substances
Toxics List

Chemical Name	CAS No.	TQ (lbs)
Acrolein	107-02-8	5,000
Acrylonitrile	107-13-1	20,000
Acrylyl chloride	814-68-6	5,000
Allyl alcohol	107-18-6	15,000
Allylamine	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	10294-34-5	5,000
Boron trifluoride	7637-07-2	5,000
Boron trifluoride compound with methylether (1:1)	353-42-4	15,000
Bromine	7726-95-6	10,000
Carbon disulfide	75-15-0	20,000
Chlorine	7782-50-5	2,500
Chlorine dioxide	10049-04-4	1,000
Chloroform	67-66-3	20,000
Chloromethyl ether	542-88-1	1,000
Chloromethyl methyl ether	107-30-2	5,000
Crotonaldehyde	4170-30-3	20,000
Crotonaldehyde (E)	123-73-9	20,000
Cyanogen chloride	506-77-4	10,000
Cyclohexylamine	108-91-8	15,000
Diborane	19287-45-7	2,500
Dimethyldichlorosilane	75-78-5	5,000
1,1-Dimethylhydrazine	57-14-7	15,000
Epichlorohydrin	106-89-8	20,000
Ethylenediamine	107-15-3	20,000
Ethyleneimine	151-56-4	10,000
Ethylene oxide	75-21-8	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 (37% or greater)	7647-01-0	15,000
Hydrocyanic acid	74-90-8	2,500
Hydrogen chloride (anhydrous)	7647-01-0	5,000
Hydrogen fluoride/Hydrofluoric acid (conc 50% or greater)	7664-39-3	1,000
Hydrogen selenide	7783-07-5	500
Hydrogen sulfide	7783-06-4	10,000
Iron pentacarbonyl-	13463-40-6	2,500
Isobutyronitrile	78-82-0	20,000
Isopropyl chloroformate	108-23-6	15,000
Methacrylonitrile	126-98-7	10,000
Methyl chloride	74-87-3	10,000
Methyl chloroformate	79-22-1	5,000
Methyl hydrazine	60-34-4	15,000
Methyl isocyanate	624-83-9	10,000
Methyl mercaptan	74-93-1	10,000
Methyl thiocyanate	556-64-9	20,000
Methyltrichlorosilane	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	10102-43-9	10,000
Oleum (fuming sulfuric acid)	8014-95-7	10,000
Peracetic acid	79-21-0	10,000
Perchloromethylmercaptan	594-42-3	10,000
Phosgene	75-44-5	500
Phosphine	7803-51-2	5,000
Phosphorus oxychloride	10025-87-3	5,000
Phosphorus trichloride	7719-12-2	15,000
Piperidine	110-89-4	15,000
Propionitrile	107-12-0	10,000
Propyl chloroformate	109-61-5	15,000
Propyleneimine	75-55-8	10,000
Propylene oxide	75-56-9	10,000
Sulfur dioxide (anhydrous)	7446-09-5	5,000
Sulfur tetrafluoride	7783-60-0	2,500
Sulfur trioxide	7446-11-9	10,000
Tetramethyllead	75-74-1	10,000
Tetranitromethane	509-14-8	10,000
Titanium tetrachloride	7550-45-0	2,500
Toluene 2,4-diisocyanate	584-84-9	10,000
Toluene 2,6-diisocyanate	91-08-7	10,000
Toluene diisocyanate (unspecified isomer)	26471-62-5	10,000
Trimethylchlorosilane	75-77-4	10,000
Vinyl acetate (monomer)	108-05-4	15,000

112(r) Regulated Substances
Flammables List

Chemical Name	CAS No.	TQ (lbs)
Acetaldehyde	75-07-0	10,000
Acetylene [Ethyne]	74-86-2	10,000
Bromotrifluorethylene	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-cis	590-18-1	10,000
2-Butene-trans	624-64-6	10,000
Carbon oxysulfide	463-58-1	10,000
Chlorine monoxide	7791-21-1	10,000
2-Chloropropylene	557-98-2	10,000
1-Chloropropylene	590-21-6	10,000
Cyanogen	460-19-5	10,000
Cyclopropane	75-19-4	10,000
Dichlorosilane	4109-96-0	10,000
Difluoroethane	75-37-6	10,000
Dimethylamine	124-40-3	10,000
2,2-Dimethylpropane	463-82-1	10,000
Ethane	74-84-0	10,000
Ethyl acetylene	107-00-6	10,000
Ethylamine	75-04-7	10,000
Ethyl chloride	75-00-3	10,000
Ethylene	74-85-1	10,000
Ethyl ether	60-29-7	10,000
Ethyl mercaptan	75-08-1	10,000
Ethyl nitrite	109-95-5	10,000
Hydrogen	1333-74-0	10,000
Isobutane	75-28-5	10,000
Isopentane	78-78-4	10,000
Isoprene	78-79-5	10,000
Isopropylamine	75-31-0	10,000
Isopropyl chloride	75-29-6	10,000
Methane	74-82-8	10,000
Methylamine	74-89-5	10,000
3-Methyl-1-butene	563-45-1	10,000
2-Methyl-1-butene	563-46-2	10,000
Methyl ether [Methane oxybis-]	115-10-6	10,000
Methyl formate [Formic acid methylester]	107-31-3	10,000
2-Methylpropene [1-Propene 2-methyl-]	115-11-7	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
Propadiene	463-49-0	10,000
Propane	74-98-6	10,000
Propylene	115-07-1	10,000
Propyne	74-99-7	10,000
Silane	7803-62-5	10,000
Tetrafluoroethylene	116-14-3	10,000
Tetramethylsilane	75-76-3	10,000
Trichlorosilane	10025-78-2	10,000
Trifluorochloroethylene	79-38-9	10,000
Trimethylamine	75-50-3	10,000
Vinyl acetylene	689-97-4	10,000
Vinyl chloride	75-01-4	10,000
Vinyl ethyl ether	109-92-2	10,000
Vinyl fluoride	75-02-5	10,000
Vinylidene chloride	75-35-4	10,000
Vinylidene fluoride	75-38-7	10,000
Vinyl methyl ether	107-25-5	10,000

Note: Flammable substances are excluded when used as a fuel or held for sale as a fuel at a retail facility.