# Effective January 5, 2018, Env-A 1400 reads as follows:

CHAPTER Env-A 1400 REGULATED TOXIC AIR POLLUTANTS

Statutory Authority: RSA 125-I:6

# PART Env-A 1401 PURPOSE AND APPLICABILITY; DEFINITION

Env-A 1401.01 Purpose.

(a) The purpose of this chapter is to implement RSA 125-I relative to preventing, controlling, abating, and limiting the emissions of toxic air pollutants into the ambient air.

(b) The ambient air limits established in this chapter are intended to promote public health by reducing human exposure to toxic air pollutants as required by RSA 125-I:1.

Env-A 1401.02 <u>Applicability</u>. This chapter shall apply to the owner or operator of any new, modified, or existing process or device located at a stationary source that emits a regulated toxic air pollutant (RTAP) into the ambient air, unless exempted under Env-A 1402.01 or Env-A 1402.02.

Env-A 1401.03 <u>Definitions</u>. For purposes of this part, the following definitions shall apply:

(a) "Accidental release" means an unanticipated emission of an RTAP into the ambient air from a stationary source, process or device, either caused by an unintentional spill or a malfunction as defined in Env-A 101.116;

(b) "Biodiesel" means a diesel fuel substitute that is composed of mono-alkyl esters of long chain fatty acids, is derived from vegetable oils or animal fats, and meets the requirements of the American Society for Testing and Materials (ASTM) specification D6751;

(c) "Biofuel" means bio-oil, bio synthetic gas, or biodiesel, alone or in any combination;

(d) "Biomass" means "biomass" as defined in RSA 125-C:2, III-a, as reprinted in Appendix B. The term does not include any mixture containing the wood component of construction and demolition debris or any material or mixture containing sewage sludge, industrial sludge, medical waste, hazardous waste, household or municipal waste, animal or human remains, animal or human waste, or radioactive waste;

(e) "Bio-oil" means a liquid fuel derived from vegetable oils, animal fats, wood, straw, forestry byproducts, or agricultural byproducts using noncombustion thermal, chemical, or biological processes, including, but not limited to, distillation, gasification, hydrolysis, or pyrolysis, but not including anaerobic digestion, composting, or incineration;

(f) "Bio synthetic gas" means a gaseous fuel derived from vegetable oils, animal fats, wood, straw, forestry byproducts, or agricultural byproducts using noncombustion thermal, chemical, or biological processes, including, but not limited to, distillation, gasification, hydrolysis, or pyrolysis, but not including anaerobic digestion, composting, or incineration;

(g) "Compliance boundary" means "compliance boundary" as defined in RSA 125-I:2 VI, as reprinted in Appendix B;

(h) "Particulate RTAP" means an RTAP that is a solid at ambient temperature; and

(i) "Pump station" means a facility that is part of a publicly owned treatment works (POTW), that consists of pumps and service equipment designed to pump wastewater from one location to another or from one elevation to another, in order to allow continuous treatment within the POTW.

#### PART Env-A 1402 EXEMPTIONS FROM APPLICABILITY

Env-A 1402.01 <u>Statutory Exemptions for Sources and Activities</u>. As specified in RSA 125-I:3, III(a) and (b), the following shall be exempt from regulation under RSA 125-I and these rules:

- (a) Normal agricultural operations;
- (b) The application of pesticides regulated pursuant to RSA 430:28 through RSA 430:48;
- (c) Emissions of RTAPs resulting from mobile sources; and

(d) Emissions of RTAPs resulting from the combustion of virgin petroleum products at stationary sources.

Env-A 1402.02 <u>Additional Exemptions for Sources and Activities</u>. Pursuant to RSA 125-I:3, III(c), the owner or operator of a device or process that meets the criteria of Env-A 1401.02 also shall be exempt from the requirements of this chapter for a particular RTAP if the emissions of such pollutant are from, or result from, any of the following sources or activities:

- (a) The combustion of one or more of the following fuels:
  - (1) Coal;
  - (2) Natural gas;
  - (3) Propane;
  - (4) Biofuels as defined in Env-A 1401.03(b); or
  - (5) Biomass as defined in Env-A 1401.03(c);

(b) A gasoline dispensing or storage facility or cargo truck as regulated pursuant to Env-A 1217 or Env-Wm 1404;

(c) An exempt activity as classified in Env-A 609.03;

(d) A pneumatic transfer system for collecting sander dust which uses a baghouse that is operated and maintained in accordance with the manufacturer's specifications;

(e) Non-metallic mineral processing plants, as defined in Env-A 2802.03;

(f) Wastewater evaporators that do not process wastewater containing volatile organic compounds (VOCs);

(g) Used oil heaters that meet the following criteria:

(1) The sum of the gross heat input design ratings for all devices equals 500,000 Btu per hour or less;

(2) The sum of the fuel use rate for all devices equals 3.6 gallons per hour of fuel use or less;

(3) All devices burn 8,640 gallons per year or less of specification used oil as defined in Env-Hw 807.02;

- (4) Each exhaust stack has an inside diameter of 8 inches or less;
- (5) Each exhaust stack outlet is 20 feet or more above the ground;
- (6) Each exhaust stack is vertical and unobstructed; and
- (7) All devices are operated and maintained in accordance with manufacturer's specifications;

(h) Spray coating operations used for maintenance limited to painting of process equipment using commercially available paints or coatings, but excluding VOC degreasing operations;

(i) Crematoriums;

(j) A publicly owned wastewater treatment facility that:

(1) Is not required to develop a pretreatment program to control pollutants received by the POTW from non-domestic sources, in accordance with 40 CFR 403, General Pretreatment Regulations for Existing and New Sources of Pollution; and

(2) Has a national pollutant discharge elimination system (NPDES) permit, in accordance with section 402 of the Clean Water Act, 33 U.S.C. 1251 <u>et seq</u>.;

(k) A pump station which is part of a publicly owned wastewater treatment facility, in accordance with (j), above;

(*l*) The use of consumer products in a manner consistent with how the general public would use the product;

(m) An automotive refinishing operation that meets the following criteria:

- (1) Each spray booth/station exhaust stack is vertical and unobstructed;
- (2) The source is in compliance with the requirements of 40 CFR Part 63, Subpart HHHHHH; and
- (3) The source uses less than 500 gallons per year of commercially available paints or coatings;

(n) An air stripper or other equipment associated with soil venting that is used to remediate a petroleum or gasoline contaminated site, and equipment that is used to control petroleum or gasoline vapors at either a petroleum or gasoline contaminated site or at a site associated with a petroleum or gasoline contaminated site, provided that such equipment is located at or associated with a state-funded site, a superfund site, or is required under the provisions of a consent order or consent agreement with the department;

(o) Routine maintenance activities associated with boilers;

(p) The use of isopropyl alcohol, nitrous oxide, and ethylene oxide at health care facilities;

(q) An accidental release as defined in Env-A 1401.03;

(r) Air strippers, soil venting equipment, or equipment used to control contaminated vapors operating for test purposes to qualify and quantify air emissions for remediation projects for a time period approved by the department;

(s) Solvent cleaning of parts and equipment performed exclusively by hand wiping or hand cleaning, provided that:

- (1) Less than 20 gallons per year are used; and
- (2) The used wipes are kept in closed containers;
- (t) Process emissions from a private, public, or vocational educational institutions, provided that:
  - (1) The emissions are primarily the result of teaching and training exercises; and
  - (2) The institution is not engaged in the manufacture of products for commercial sale;

(u) Degreasing and cleaning units that exclusively use aqueous caustic solutions at ambient temperatures in non-aeriated baths or tanks;

(v) Rooms, buildings, and warehouses used exclusively for:

- (1) Storing chemicals, provided such chemicals are stored in closed containers;
- (2) Filling chemical containers or transferring chemicals from one container to another; and
- (3) Sampling chemicals for quality assurance and quality control purposes;

(w) Powder coating operations;

(x) Surface spray coating at facilities that do not spray apply coatings containing strontium chromate (CAS #7789-06-02) and have actual VOC emissions of 1,000 pounds or less in any 12-month period from all coating materials, coating material components, other materials mixed with coating materials prior to application, and cleaning solvents; and

(y) Particulate RTAP emissions, from processes not equipped with removal equipment, that are vented inside the building and, in aggregate, do not exceed 1,000 pounds in any consecutive 12-month period.

Env-A 1402.03 <u>Additional Exemptions for Certain Air Contaminants</u>. As authorized by RSA 125-I:3, III(c), the following emissions shall be exempt from this chapter:

(a) Emissions of a hazardous air pollutant (HAP), as defined in Env-A 101.97, from a process or device, provided that process or device uses the requisite pollution control equipment to comply with a national emission standard for HAPs as codified in 40 CFR 61 or 40 CFR 63;

(b) RTAP emissions from the process or device specified in (a), above, that are controlled by the requisite pollution control equipment to the same degree of efficiency as required by the national emission standard for the HAP emitted from that process or device;

(c) HAP emissions from a solid waste incineration unit that is subject to rules or plans authorized by, and adopted in accordance with, §129 of the Act, provided the unit uses the pollution control equipment required to comply with those rules or plans; and

(d) RTAP emissions from the solid waste incineration unit specified in (c), above, that are controlled to the same degree of efficiency as required by the rule or plan for the HAP emitted from that unit.

## PART Env-A 1403 PERMIT REQUIREMENTS

Env-A 1403.01 <u>Permit Required</u>. Prior to operating, the owner or operator of a device or process subject to this chapter shall obtain a temporary permit, state permit to operate, or title V operating permit in accordance with Env-A 600 unless exempted by Env-A 1403.02 or Env-A 1403.03.

Env-A 1403.02 <u>Exemption from Permit Requirement Based on Demonstration of Compliance</u>. The owner or operator of a device or process otherwise subject to this chapter who demonstrates compliance by one of the methods identified in Env-A 1405 shall not be required to obtain a permit.

Env-A 1403.03 <u>Exemption from Permit Requirement Based on Nature and Amount of Emissions</u>. The owner or operator of any device or process otherwise subject to this chapter for a particular RTAP shall not be required to obtain a permit if all of the following conditions are met:

(a) The actual emissions of the pollutant:

(1) Are less than the annual and 24-hour *de minimis* emission levels for that pollutant, using the *de minimis* emission level method described in Env-A 1405.03;

(2) Are less than the annual and 24-hour ambient air limits for that pollutant using the in-stack concentration method described in Env-A 1405.04;

(3) Are less than 50 percent of the annual and 24-hour ambient air limits for that pollutant using the adjusted in-stack concentration method described in Env-A 1405.05; or

(4) Are less than 50 percent of the annual and 24-hour ambient air limits for that pollutant using the air dispersion modeling analysis method described in Env-A 1405.02;

(b) Emissions are not subject to treatment or removal by pollution control equipment prior to being emitted to the ambient air, except at facilities performing spray coating operations that demonstrate compliance with the spray booth filter provisions in §63.11173(e)(2)(i) of 40 CFR 63 subpart HHHHHH, "National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources"; and

(c) Documentation that emissions meet the criteria specified in (a) and (b), above, is retained at the site and made available to the department for inspection for as long as the exemption is claimed.

# PART Env-A 1404 APPLICATION PROCEDURES

Env-A 1404.01 Application Procedures for New or Modified Devices or Processes.

(a) The owner or operator of a new or modified device or process requiring a permit under this chapter shall submit an application for a temporary permit in accordance with Env-A 607.03.

(b) Pursuant to RSA 125-I:5, I, the owner or operator shall not operate the device or process until a temporary permit is issued.

Env-A 1404.02 <u>Application Procedures for Existing Sources Requiring a Permit after the List is</u> <u>Revised</u>. Pursuant to RSA 125-I:5, IV, if the department revises the list of regulated toxic air pollutants or their respective ambient air limits or classifications as set forth in Table 1450-1 in Env-A 1450.01, and as a result of such revision any source is required to obtain or modify a permit under RSA 125-C or RSA 125-I, the owner or operator of such source shall complete and file an application for such permit or permit modification within 90 days following publication of notice of such final revision in the New Hampshire <u>Rulemaking Register</u>.

#### PART Env-A 1405 METHODS OF DEMONSTRATING COMPLIANCE

Env-A 1405.01 Methods of Demonstrating Compliance.

(a) The owner or operator of any device or process that emits a regulated toxic air pollutant shall determine compliance with the ambient air limits by using at least one of the following methods:

(1) Air dispersion modeling analysis as specified in Env-A 1405.02;

(2) De minimis emission level method as specified in Env-A 1405.03;

(3) In-stack concentration method as specified in Env-A 1405.04;

(4) Adjusted in-stack concentration method as specified in Env-A 1405.05; or

(5) Calculations, results, or analyses from an alternative method of compliance demonstration approved pursuant to Env-A 1405.06.

(b) Upon request, the owner or operator of any device or process that emits a regulated toxic air pollutant shall provide documentation of compliance with the ambient air limits to the department.

Env-A 1405.02 <u>Air Dispersion Modeling Analysis</u>. If air dispersion modeling analysis is selected, the owner or operator, or the department at the request of the owner or operator, shall conduct air dispersion modeling analysis demonstrating that the concentration of uncontrolled emissions of each regulated toxic air pollutant is equal to or below the corresponding ambient air limit at and beyond the compliance boundary in accordance with Env-A 606.04.

Env-A 1405.03 <u>De Minimis Emission Level Method.</u> If the *de minimis* emission level method is selected, the owner or operator shall demonstrate that the uncontrolled emissions are equal to or below the appropriate *de minimis* level from Table 1450-1 in Env-A 1450.01 when the airflow exiting the vent or stack is vertical and unobstructed.

Env-A 1405.04 <u>In-stack Concentration Method</u>. If the in-stack concentration method is selected, the owner or operator shall perform a calculation demonstrating that the in-stack concentration of the uncontrolled emissions of each regulated toxic air pollutant, as determined by the following calculations, is equal to or below the corresponding ambient air limit, where:

(a) "X" means:

(1) For devices or processes emitting from one stack, the emission rate of a regulated toxic air pollutant in pounds per hour; or

(2) For devices or processes emitting from more than one stack, the sum of emission rates of each regulated toxic air pollutant from each stack in pounds per hour;

(b) "Y" means the emission rate of a regulated toxic air pollutant in grams per second as determined by dividing X by 7.94, as shown in the formula below:

Y = X / 7.94

(c) "Z" means the emission rate of a regulated toxic air pollutant in micrograms per second as determined by multiplying Y by  $10^6$ , as shown in the formula below:

$$Z = Y \times 10^6$$

(d) "A" means:

(1) For devices or processes emitting from one stack, the stack volume flow in actual cubic feet per minute; or

(2) For devices or processes emitting from more than one stack, the sum of stack volume flows from each stack in actual cubic feet per minute;

(e) "B" means the stack volume flow in actual cubic meters per second as determined by dividing A by 2119, as shown in the formula below:

B = A / 2119

(f) The in-stack concentration of a regulated toxic air pollutant in micrograms per cubic meter from a device or process either emitting from a single stack or from more than one stack shall be calculated by dividing Z by B, as shown in the formula below:

In-stack Concentration = Z/B

Env-A 1405.05 Adjusted In-stack Concentration Method.

(a) If the adjusted in-stack concentration method is selected, the owner or operator shall perform a calculation pursuant to (b) or (c), below, demonstrating that the adjusted in-stack concentration of the uncontrolled emissions of each regulated toxic air pollutant is equal to or below the corresponding ambient air limit when the airflow exiting the vent or stack is vertical and unobstructed.

(b) For facilities where the edge of the building housing the process or device is less than 40 feet to the nearest compliance boundary, the adjusted in-stack concentration in micrograms per cubic meter  $(\mu g/m^3)$  of a regulated toxic air pollutant from a device or process emitting either from a single stack or

from more than one stack shall be calculated by dividing the in-stack concentration in  $\mu g/m^3$ , determined in accordance with Env-A 1405.04, by 250, as shown in the formula below:

Adjusted In-stack Concentration  $(\mu g/m^3) = \frac{\text{In-stack Concentration } (\mu g/m^3)}{250}$ 

(c) For facilities where the edge of the building housing the process or device is greater than or equal to 40 feet to the nearest compliance boundary, the adjusted in-stack concentration in  $ug/m^3$  of a regulated toxic air pollutant from a device or process emitting either from a single stack or from more than one stack shall be calculated by dividing the in-stack concentration in  $ug/m^3$ , determined in accordance with Env-A 1405.04, by 700, as shown in the formula below:

Adjusted In-stack Concentration  $(\mu g/m^3) = \frac{\text{In-stack Concentration } (\mu g/m^3)}{700}$ 

#### Env-A 1405.06 Alternative Methods.

(a) Any person wishing to use a method for determining compliance other than one specified in Env-A 1405.02 through Env-A 1405.05 shall submit a request to the department for approval of the method as specified in (b), below.

(b) Any person making such a request shall submit the following information to the department:

(1) A description of the proposed alternate method and each device or process to which the proposed alternate method will be applied;

(2) The identity, location, and description of the facility at which the alternate method is proposed to be used;

(3) The name, chemical abstracts service (CAS) registry number, classification, and ambient air limits for each regulated toxic air pollutant emitted from each device or process subject to Env-A 1400; and

(4) Technical data and information demonstrating that the proposed alternate method produces results that are at least as precise and accurate as those produced by the methods specified in Env-A 1405.02 through Env-A 1405.05.

(c) Within 60 days of receipt of a complete request, the department shall make a decision on the request and notify the person requesting approval of the decision. If the request is denied, the decision shall specify the reason(s) for the denial.

(d) The department shall not approve a request for use of an alternate method unless:

(1) The request contains all of the information required by (b), above; and

(2) The proposed alternate method produces results that are at least as precise and accurate as those produced by the methods specified in Env-A 1405.02 through Env-A 1405.05.

Env-A 1405.07 <u>Alternate Compliance Boundaries</u>. For a facility operating a process or device in a building or premises pursuant to a lease, license, or any other agreement granting the right to use or occupy only a limited portion of the property upon which such process or device is located, the compliance boundary shall be the outer edge of that portion of the property under the direct control of the owner or operator of that process or device.

## PART Env-A 1406 CLASSIFICATION OF REGULATED TOXIC AIR POLLUTANTS

Env-A 1406.01 Classification of Regulated Toxic Air Pollutants.

(a) As required by RSA 125-I:4, II, the department shall classify each regulated toxic air pollutant as a class I regulated toxic air pollutant, class II regulated toxic air pollutant, or class III regulated toxic air pollutant.

(b) Such classifications shall be made in accordance with this part.

Env-A 1406.02 <u>Criteria for Classification of Class I Regulated Toxic Air Pollutants</u>. The department shall classify a regulated toxic air pollutant as a class I regulated toxic air pollutant if it meets at least one of the following criteria:

(a) Pursuant to RSA 125-I:2, XIV(a), it is a group A, group B1, or group B2 carcinogen, as described in "Guidelines for Carcinogen Risk Assessment," 51 Federal Register 33,992, at 34,000 (Sept. 24, 1986);

(b) It is categorized as "Carcinogenic to Humans" or "Likely to be Carcinogenic to Humans" as described in EPA's updated "Guidelines for Carcinogenic Risk Assessment," 70 Federal Register 17765 to 17817 (April 7, 2005);

(c) It is a category A1 or A2 carcinogen, as described in <u>Threshold Limit Values for Chemical</u> <u>Substances and Physical Agents and Biological Exposure Indices</u>, published by the American Conference of Governmental Industrial Hygienists (ACGIH);

(d) It has been demonstrated through at least one study conducted in accordance with generally accepted scientific principles that it is capable of inducing reproductive or developmental effects in experimental laboratory animals at doses less than or equal to 500 mg/kg; or

- (e) It has an acute toxicity where the:
  - (1) Oral LD<sub>50</sub> is less than or equal to 50 milligrams per kilogram of body weight (mg/kg);
  - (2) Inhalation  $LC_{50}$  is less than or equal to 200 parts per million (ppm); or
  - (3) Dermal  $LD_{50}$  is less than or equal to 200 mg/kg.

Env-A 1406.03 <u>Criteria for Classification of Class II Regulated Toxic Air Pollutants</u>. The department shall classify a regulated toxic air pollutant as a class II regulated toxic air pollutant if it does not qualify as a class I regulated toxic air pollutant and meets at least one of the following criteria:

(a) Pursuant to RSA 125-I:2, XIV(b), it is a group C carcinogen, as described in "Guidelines for Carcinogen Risk Assessment," 51 Federal Register 33,992, at 34,000 (Sept. 24, 1986);

(b) It is categorized as "Suggestive Evidence of Carcinogenic Potential" as described in EPA's updated "Guidelines for Carcinogenic Risk Assessment," 70 Federal Register 17765 to 17817, April 7, 2005;

(c) It is a category A3 carcinogen, as described in <u>Threshold Limit Values for Chemical Substances</u> and <u>Physical Agents and Biological Exposure Indices</u>, published by the ACGIH;

(d) It has been demonstrated through at least one study conducted in accordance with generally accepted scientific principles that it is capable of inducing reproductive or developmental effects in experimental laboratory animals at doses greater than 500 mg/kg;

(e) It has an acute toxicity where the:

(1) Oral  $LD_{50}$  is greater than 50 mg/kg but less than 500 mg/kg;

- (2) Inhalation  $LC_{50}$  is greater than 200 ppm but less than 2,000 ppm; or
- (3) Dermal  $LD_{50}$  is greater than 200 mg/kg but less than 1,000 mg/kg;

(f) It has been demonstrated through at least one study conducted in accordance with generally accepted scientific principles that it induces mutagenic effects; or

(g) It has been demonstrated through at least one study conducted in accordance with generally accepted scientific principles that it produces adverse chronic non-carcinogenic systemic effects.

Env-A 1406.04 <u>Criteria for Classification of Class III Regulated Toxic Air Pollutants</u>. As specified in RSA 125-I: 2, XIV(c), the department shall classify a regulated toxic air pollutant as a class III regulated toxic air pollutant if it is any regulated toxic air pollutant other than a class I or class II regulated toxic air pollutant.

# PART Env-A 1407 DESIGNATION OF SAFETY FACTORS

Env-A 1407.01 <u>Designation of Safety Factors</u>. For the purpose of providing adequate protection to sensitive populations, the department shall designate a safety factor for each regulated toxic air pollutant, as follows:

- (a) For a class I regulated toxic air pollutant, the safety factor shall be 100;
- (b) For a class II regulated toxic air pollutant, the safety factor shall be 71; and
- (c) For a class III regulated toxic air pollutant, the safety factor shall be 24.

## PART Env-A 1408 DESIGNATION OF TIME ADJUSTMENT FACTORS

## Env-A 1408.01 Designation of Time Adjustment Factors.

(a) In order to account for differing effects of certain chemicals over time, the department shall designate a time adjustment factor according to the characteristics of the regulated toxic air pollutant.

(b) The time adjustment factor shall be used to determine the ambient air limit as specified in Env-A 1409.02.

Env-A 1408.02 <u>Criteria for the Designation of Time Adjustment Factors</u>. The department shall designate the time adjustment factors based on the following criteria:

(a) The time adjustment factor shall be 1.0 for regulated toxic air pollutants that:

(1) Have an occupational exposure limit which is intended to primarily prevent irritation or discomfort; or

(2) For which there are essentially no known cumulative effects resulting from extended exposures to such pollutants at concentration levels at or near the occupational exposure limit;

(b) The time adjustment factor shall be 2.0 for regulated toxic air pollutants that have an occupational exposure limit which is intended to prevent acute exposure effects;

(c) The time adjustment factor shall be 2.5 for regulated toxic air pollutants that have a ceiling limit value set as an occupational exposure limit which was not intended to be exceeded at any time; and

(d) The time adjustment factor shall be 2.8 for regulated toxic air pollutants that:

(1) Have an occupational exposure limit which is set by technological feasibility or commonly recognized good hygiene practice;

(2) Present cumulative health hazards and have an occupational exposure limit intended to prevent excessive accumulation in the body from extended periods of exposure; or

(3) Present both acute and cumulative health hazards.

PART Env-A 1409 DETERMINATION OF 24-HOUR AMBIENT AIR LIMITS

Env-A 1409.01 Determination of 24-Hour Ambient Air Limits.

(a) Where a reference concentration limit has been established by the EPA for a regulated toxic air pollutant, the 24-hour ambient air limit for that pollutant shall be the reference concentration limit if:

(1) The regulated toxic air pollutant causes developmental or reproductive effects; or

(2) The annual ambient air limit is based on the reference concentration limit, and the 24-hour ambient air limit, as calculated in accordance with (b), below, is less than the reference concentration limit.

(b) In all cases other than those specified in (a), above, the 24-hour ambient air limit shall be a modified occupational health standard as determined by the calculation specified in Env-A 1409.02.

Env-A 1409.02 Calculation of 24-Hour Ambient Air Limits.

- (a) "OEL" means the occupational exposure limit for the regulated toxic air pollutant.
- (b) "SF" means the safety factor as determined by Env-A 1407.
- (c) "TAF" means the time adjustment factor as determined by Env-A 1408.

(d) To calculate the 24-hour ambient air limit for a regulated toxic air pollutant, occupational exposure limit shall be divided by the product of the safety factor and the time adjustment factor, as in the formula below:

 $AAL_{(24 \text{ Hour})} = OEL / (SF x TAF)$ 

PART Env-A 1410 DETERMINATION OF ANNUAL AMBIENT AIR LIMITS

Env-A 1410.01 Determination of Annual Ambient Air Limits.

(a) Where there is a reference concentration limit established by the EPA, the annual ambient air limit shall be the reference concentration limit, except as provided in (b), below.

(b) Where a regulated toxic air pollutant has a reference concentration limit established by the EPA and is classified as Class I under Env-A 1406.02(a) or (b), and the occupational exposure limit is based on carcinogenic effects, the annual ambient air limit shall be either a modified occupational health standard as determined by the calculation specified in Env-A 1410.02, or the reference concentration limit established by the EPA, whichever number is lower.

(c) Where there is no reference concentration limit, the annual ambient air limit shall be a modified occupational health standard as determined by the calculation specified in Env-A 1410.02.

Env-A 1410.02 Calculation of Annual Ambient Air Limits.

- (a) "OEL" means the occupational exposure limit for the regulated toxic air pollutant.
- (b) "SF" means the safety factor as determined by Env-A 1407.

(c) To calculate the annual ambient air limit for a regulated toxic air pollutant, the occupational exposure limit shall be divided by the product of 4.2 and the safety factor, as in the formula below:

 $AAL_{(Annual)} = OEL / (SF x 4.2)$ 

Env-A 1410.03 <u>Calculation of 24-Hour *De Minimis* Emission Level</u>. To calculate the 24-hour *de minimis* emission level for a regulated toxic air pollutant in pounds per day, the 24-hour ambient air limit shall be divided by 84.17.

Env-A 1410.04 <u>Calculation of Annual *De Minimis* Emission Level</u>. The annual *de minimis* emission level for a regulated toxic air pollutant in pounds per year shall be the lower of the levels calculated pursuant to (a) or (b), below:

- (a) The annual ambient air limit multiplied by 16.28; or
- (b) The 24-hour *de minimis* emission level multiplied by 365.

# PART Env-A 1411 LIST OF ALL REGULATED TOXIC AIR POLLUTANTS AND OTHER INFORMATION

Env-A 1411.01 Establishment of List of All Regulated Toxic Air Pollutants and Other Information.

(a) The list established by the department pursuant to RSA 125-I:6, II, shall contain the following information for each regulated toxic air pollutant (RTAP):

- (1) The chemical name of the RTAP;
- (2) The chemical abstracts service number of the RTAP;
- (3) The classification as class I, class II, or class III for the RTAP;
- (4) The 24-hour ambient air limit for the RTAP;
- (5) The annual ambient air limit for the RTAP;
- (6) The 24-hour *de minimis* emission level for the RTAP; and
- (7) The annual *de minimis* emission level for the RTAP.

(b) The RTAP list described in (a), above, shall be adopted and published in table format in Env-A 1450.

Env-A 1411.02 <u>Adoption of the RTAP List</u>. The RTAP list described in Env-A 1411.01 shall be adopted according to the rulemaking process specified in RSA 541-A.

Env-A 1411.03 Publication of Notice of the RTAP List.

(a) As required by RSA 125-I:4, IV, the department shall submit notice of the RTAP list for publication in the New Hampshire <u>Rulemaking Register</u> immediately upon the effective date of the rules establishing the list.

(b) At that time, and annually thereafter, the department shall publish the list in a fact sheet and within any publicly-accessible database that is available to the department.

(c) The department also shall make the list available to any person who requests it.

#### PART Env-A 1412 MODIFICATION OF THE RTAP LIST

Env-A 1412.01 <u>Process for Modifications to the RTAP List</u>. As specified in RSA 125-I:4, V, all additions, deletions and modifications to any part of the RTAP list shall be made through the rulemaking process described in RSA 541-A.

#### Env-A 1412.02 Petitions to Modify the RTAP List.

(a) If a person wishes to add a substance or compound to, delete a substance or compound from, or modify a specific parameter on the RTAP list, the person shall petition the commissioner pursuant to RSA 541-A:4 by providing the information specified in Env-A 1412.03 in writing to the commissioner.

(b) Where data limitations exist which prevent the derivation of an ambient air limit, a person intending to use a substance or compound named on the list shall petition the commissioner by providing the information specified in Env-A 1412.03 in writing to the commissioner.

Env-A 1412.03 <u>Contents of Petitions</u>. A petition submitted pursuant to Env-A 1412.02(a) or (b) shall include the following information:

- (a) Which one or more of the following actions is proposed:
  - (1) Add a substance or compound to the list;
  - (2) Delete a substance or compound from the list;
  - (3) Modify the classification of a regulated toxic air pollutant named on the list;
  - (4) Modify or add an ambient air limit of a regulated toxic air pollutant named on the list;
  - (5) Modify a time adjustment factor of a regulated toxic air pollutant named on the list;
  - (6) Modify an occupational exposure limit of a regulated toxic air pollutant named on the list; or
  - (7) Modify a *de minimis* emission level of a regulated toxic air pollutant named on the list; and
- (b) A statement of the reason(s) for the proposed revision to the list;

(c) If the proposal is to add a substance or compound to the RTAP list, data and documentation that support the proposed addition, including at least one study that has been conducted in accordance with generally accepted scientific principles which demonstrates that the substance or compound is known to cause, or can reasonably be anticipated to cause, acute, chronic, mutagenic, reproductive, or developmental health effects in humans as a result of exposure to such substance or compound;

(d) If the proposal is to delete a substance or compound from the RTAP list, data and documentation that support the proposed deletion, including at least one study that has been conducted in accordance with generally accepted scientific principles which demonstrates that the substance or compound cannot reasonably be anticipated to cause acute, chronic, mutagenic, reproductive, or developmental health effects in humans as a result of exposure to such substance or compound; and

(e) If the proposal is to modify a parameter for a substance or compound on the RTAP list, data and documentation that support the proposed modification, including at least one study that has been conducted in accordance with generally accepted scientific principles which demonstrates that:

(1) If the petition is for stricter regulatory control of a substance or compound, the parameter specified in the RTAP list is not adequate to protect against acute, chronic, mutagenic, reproductive, or developmental health effects in humans as a result of exposure to the substance or compound; or

(2) If the petition is for more lenient regulatory control of a substance or compound, the parameter specified in the RTAP list is more stringent than is necessary to protect against acute,

chronic, mutagenic, reproductive, or developmental health effects in humans as a result of exposure to the substance or compound.

Env-A 1412.04 Decision to Grant or Deny the Petition.

(a) The commissioner shall act on the petition within the time limits specified in RSA 541-A:4.

(b) As specified in RSA 125-I:4, V(a), the commissioner shall not add a substance or compound to the RTAP list unless there is at least one study that has been conducted in accordance with generally accepted scientific principles that demonstrates that the substance or compound is known to cause or may reasonably be anticipated to cause acute, chronic, mutagenic, reproductive, or developmental health effects in humans as a result of exposure to such substances or compounds.

(c) As specified in RSA 125-I:4, V(b), the commissioner shall not delete a substance or compound from the RTAP list unless there is at least one study that has been conducted in accordance with generally accepted scientific principles that demonstrates that the substance or compound cannot reasonably be anticipated to cause acute, chronic, mutagenic, reproductive, or developmental health effects in humans as a result of exposure to such substances or compounds.

(d) In addition to the criteria specified in (b) or (c), above, as applicable, the commissioner shall not grant a petition unless doing so will result in standards that promote human health.

# PART Env-A 1413 REQUIREMENTS FOR SOURCES OF HAZARDOUS AIR POLLUTANTS SUBJECT TO SECTION 112 OF THE CLEAN AIR ACT

Env-A 1413.01 <u>Sources of Hazardous Air Pollutants Subject to §112 of the Act</u>. Nothing in this chapter shall be construed as modifying or eliminating the obligation of any source of hazardous air pollutants that is subject to §112 of the Clean Air Act to comply with those requirements.

PART Env-A 1414 - RESERVED

PARTS Env-A 1415 - 1449 - RESERVED

## PART Env-A 1450 TABLE OF ALL REGULATED TOXIC AIR POLLUTANTS

## Env-A 1450.01 Table of All Regulated Toxic Air Pollutants.

(a) The AALs and *de minimis* values for "wood dust (western red cedar)," "wood dust (oak & beech)," "wood dust (birch, mahogany, teak, walnut)" and "wood dust (all other species)" in Table 1450-1, below, shall apply only to emissions from sanding operations at sources belonging to Major Group 24 or 25 as described in the Standard Industrial Classification Manual, 1987, and assigned by EPA the following Source Classification Code (SCC) numbers: 30700702, 30700806, 30700807, 30702003, 30703096, 30703097, 30703098, and 30703099.

(b) Pursuant to Env-A 1411.01, the list naming all regulated toxic air pollutants and other information shall be as set forth in Table 1450-1, below:

## Table 1450-1: RTAP List

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )		24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual De Minimis (lbs/yr)
0 - 00 - 0	Coat Dust (anthracite), respirable fraction	II	2.0	1.3	0.024	8.7

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual De Minimis (lbs/yr)
0-00-0	Coal Dust (bituminous), respirable fraction	II	4.5	3.0	0.053	20
0-00-0	Synthetic vitreous fibers, Continuous Filament Glass Fiber (inhalable)	II	70	17	0.83	277
0 - 00 - 0	Fluorides, as F	Ι	8.9	6.0	0.11	39
0-00-0	Grain Dust (Oat, Wheat, Barley)	II	20	13	0.24	87
0-00-0	Stearates	II	50	34	0.59	217
0-00-0	Wood Dust (western red cedar), inhalable fraction (See Env-A 1450.01(a))	II	2.5	1.7	0.030	11
0-00-0	Wood Dust (oak and beech), inhalable fraction (See Env-A 1450.01(a))	Ι	3.6	2.4	0.043	16
0-00-0	Wood Dust (birch, mahogany, teak, and walnut), inhalable fraction (See Env-A 1450.01(a))	Ι	3.6	2.4	0.043	16
0-00-0	Wood Dust (all other species), inhalable fraction (See Env-A 1450.01(a))	III	15	9.9	0.18	65
50 - 00 - 0	Formaldehyde	Ι	1.3	0.88	0.015	5.6
50 - 29 - 3	DDT	Ι	3.6	2.4	0.043	16
50 - 32 - 8	Benzo[a]pyrene	Ι	0.0050	0.0050	0.000059	0.022
50 - 78 - 2	Acetylsalicylic acid	Ι	25	12	0.30	108
52 - 68 - 6	Trichlorophon, inhalable fraction	Ι	3.6	2.4	0.043	16
55 - 38 - 9	Fenthion – inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
55 - 63 - 0	Nitroglycerin (NG)	Ι	1.6	1.1	0.019	6.9
56 - 23 - 5	Carbon tetrachloride	Ι	111	100	1.3	481
56 - 38 - 2	Parathion, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual De Minimis (lbs/yr)
56 - 55 - 3	Benz[a]anthracene	Ι	0.36	0.24	0.0043	1.6
56 - 72 - 4	Coumaphos – inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
57-11-4	Stearic acid	III	208	99	2.5	903
57 - 14 - 7	1,1-Dimethylhydrazine	Ι	0.089	0.060	0.0011	0.39
57 - 24 - 9	Strychnine	Ι	0.54	0.36	0.0064	2.3
57 – 57 – 8	B -Propiolactone	Ι	7.5	3.6	0.089	33
57 – 74 – 9	Chlordane	Ι	1.8	0.70	0.021	7.8
58 - 89 - 9	Lindane	Ι	1.8	1.2	0.021	7.8
60 - 29 - 7	Ethyl ether	Ι	4321	2881	51	18738
60 - 34 - 4	Methyl hydrazine	Ι	0.068	0.045	0.00081	0.29
60 - 57 - 1	Dieldrin, inhalable fraction and vapor	Ι	0.36	0.24	0.0042	1.5
61 - 82 - 5	Amitrole	Ι	0.71	0.48	0.0084	3.1
62 - 53 - 3	Aniline	Ι	27	1.0	0.32	16
62 - 73 - 7	Dichlorvos (DDVP), inhalable fraction and vapor	Ι	0.50	0.50	0.0059	2.2
62 - 74 - 8	Sodium fluoroacetate	Ι	0.18	0.12	0.0021	0.78
62 - 75 - 9	N-Nitrosodimethylamine	Ι	0.0010	0.0010	0.000012	0.0043
63 - 25 - 2	Carbaryl, inhalable fraction and vapor	Ι	1.8	1.2	0.021	7.8
64 - 17 - 5	Ethanol	Ι	6714	4476	80	29115
64 - 18 - 6	Formic acid	II	66	32	0.78	286
64 – 19 – 7	Acetic Acid	II	126	84	1.5	546
64 - 67 - 5	Diethyl Sulfate	II	1.0	0.67	0.12	4.3

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual <i>De Minimis</i> (lbs/yr)
67 – 56 – 1	Methanol	Ι	20000	20000	238	86729
67 - 63 - 0	2-Propanol	Ι	1757	1171	21	7619
67 – 64 – 1	Acetone	Ι	2120	1413	25	9193
67 - 66 - 3	Chloroform	Ι	175	117	2.1	759
67 – 72 – 1	Hexachloroethane	Ι	35	30	0.42	152
68 – 11 – 1	Thioglycolic acid	Ι	19	9.0	0.23	82
68 - 12 - 2	Dimethylformamide	Ι	107	30	1.3	464
71 – 23 – 8	n-Propyl alcohol	II	1731	824	21	7506
71 - 36 - 3	n-Butanol	II	305	203	3.6	1323
71 - 43 - 2	Benzene	Ι	5.7	3.8	0.068	25
71 - 55 - 6	Methyl chloroform	Ι	6821	5000	81	29579
72 - 20 - 8	Endrin	Ι	0.36	0.24	0.0043	1.6
72 - 43 - 5	Methoxychlor	Ι	36	24	0.43	156
3547-04-4	DDE (1,1-Dichloro-2,2-bis(P- Chlorophenyl))	Ι	0.10	0.10	0.0012	0.43
74 - 83 - 9	Methyl bromide	II	20	5.0	0.24	81
74 - 87 - 3	Methyl chloride	Ι	368	245	4.4	1596
74 - 88 - 4	Methyl iodide	Π	60	40	0.71	260
74 - 89 - 5	Methylamine	II	45	21	0.53	195
74 - 90 - 8	Hydrogen cyanide, as CN	Ι	19	0.80	0.23	13
74 – 93 – 1	Methyl mercaptan	II	4.9	3.3	0.058	21
74 - 96 - 4	Ethyl bromide	II	111	74	1.3	481
74 – 97 – 5	Chlorobromomethane	Π	5332	3555	63	23122

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual <i>De Minimis</i> (lbs/yr)
74 – 99 – 7	Methyl acetylene	II	8249	5500	98	35771
75 - 00 - 3	Ethyl chloride	Ι	10000	10000	119	43365
75 - 01 - 4	Vinyl chloride	Ι	9.3	6.2	0.11	40
75 - 02 - 5	Vinyl fluoride	Ι	6.8	4.5	0.081	29
75 - 04 - 7	Ethylamine	II	46	31	0.547	199
75 - 05 - 8	Acetonitrile	Ι	120	60	1.4	520
75 - 07 - 0	Acetaldehyde	Ι	161	9.0	1.9	147
75 - 08 - 1	Ethyl mercaptan	II	9.2	4.4	0.11	40
75 - 09 - 2	Methylene chloride (Dichloromethane)	Ι	621	600	7.4	2693
75 – 12 – 7	Formamide	II	91	60	1.1	395
75 - 15 - 0	Carbon disulfide	Ι	700	700	8.3	3036
75 - 21 - 8	Ethylene oxide	Ι	6.4	4.3	0.076	28
75 - 25 - 2	Bromoform	Ι	19	12	0.23	82
75 - 31 - 0	Isopropylamine	II	85	40	1.0	369
75 - 34 - 3	1,1-Dichloroethane	II	2037	1358	24	8833
75 - 35 - 4	Vinylidene chloride	II	200	200	2.4	867
75 - 43 - 4	Dichlorofluoromethane	II	211	141	2.5	915
75 - 44 - 5	Phosgene	Ι	1.4	0.30	0.017	4.9
75 - 45 - 6	Chlorodifluoromethane	Ι	50000	50000	594	216823
75 - 47 - 8	Iodoform	II	70	34	0.83	304
75 - 50 - 3	Trimethylamine	Π	60	40	0.71	260
75 - 52 - 5	Nitromethane	III	744	496	8.8	3226

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual De Minimis (lbs/yr)
75 - 55 - 8	Propyleneimine	Ι	1.7	1.1	0.020	7.2
75 - 56 - 9	Propylene oxide	Ι	17	11	0.20	74
75 - 65 - 0	tert-Butanol	II	2134	1016	25	9254
75 – 74 – 1	Tetramethyl lead, as Pb	Ι	0.54	0.36	0.0064	2.3
75 - 86 - 5	Acetone cyanohydrin, as CN	Ι	18	12	0.21	78
76 - 03 - 9	Trichloroacetic acid	Ι	12	7.9	0.14	52
76 - 06 - 2	Chloropicrin	Ι	3.4	1.6	0.040	15
76 – 13 – 1	1,1,2-Trichloro-1,2,2- trifluoroethane	II	38581	25721	458	167305
76 - 22 - 2	Camphor, synthetic	Π	85	40	1.0	369
76 - 44 - 8	Heptachlor	Ι	0.18	0.12	0.0021	0.78
77 – 47 – 4	Hexachlorocyclopentadiene (HCCPD)	Π	0.55	0.20	0.0065	2.4
77 – 58 – 7	Dibutyltin dilaurate (as Tin, organic cmpds)	Ι	0.36	0.24	0.0043	1.6
77 – 73 – 6	Dicyclopentadiene	Ι	96	64	1.1	416
77 – 78 – 1	Dimethyl sulfate	Ι	1.9	1.2	0.023	8.2
78 - 00 - 2	Tetraethyl lead, as Pb	Ι	0.36	0.24	0.0043	1.6
78 - 30 - 8	Triorthocresyl phosphate, inhalable fraction and vapor	Ι	0.071	0.048	0.00085	0.31
78 - 34 - 2	Dioxathion, inhalable fraction and vapor	Ι	0.36	0.24	0.0043	1.6
78 – 59 – 1	Isophorone	Π	141	94	1.7	611
78 - 83 - 1	Isobutyl alcohol	II	765	510	9.1	3317
78 - 87 - 5	Propylene dichloride (1,2- dichloropropane)	ΙΙ	232	4.0	2.8	65
78 - 89 - 7	2-Chloro-1-propanol	Π	27	13	0.32	117

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual <i>De Minimis</i> (lbs/yr)
78 - 92 - 2	sec-Butanol	II	2134	1016	25	9254
78 - 93 - 3	Methyl ethyl ketone (MEK)	Ι	5000	5000	59	21682
78 - 94 - 4	Methyl vinyl ketone	Ι	2.3	1.4	0.027	10
78 - 95 - 5	Chloroacetone	Ι	15	9.0	0.18	65
79 - 00 - 5	1,1,2-Trichloroethane	II	277	184	3.3	1201
79 – 01 – 6	Trichloroethylene	Ι	2.0	2.0	0.024	8.7
79 – 04 – 9	Chloroacetyl chloride	II	1.6	0.77	0.019	6.9
79 - 06 - 1	Acrylamide, inhalable fraction and vapor	Ι	6.0	6.0	0.071	26
79 - 09 - 4	Propionic acid	II	211	101	2.5	915
79 – 10 – 7	Acrylic acid	Ι	21	1.0	0.25	16
79 - 11 - 8	Monochloroacetic acid (Chloroacetic acid) –inhalable fraction and vapor	III	29	19	0.34	126
79-21-0	Peracetic acid, inhalable fraction and vapor	Ι	6.2	2.9	0.074	27
79 – 27 – 6	1,1,2,2-Tetrabromoethane (Acetylene tetrabromide) – inhalable fraction and vapor	Ι	5.0	3.4	0.059	22
79 - 34 - 5	1,1,2,2-Tetrachloroethane	Ι	25	16	0.30	108
79 - 41 - 4	Methacrylic acid	Π	352	235	4.2	1526
79 - 43 - 6	Dichloroacetic acid	Ι	9.4	6.3	0.11	41
79 – 44 – 7	Dimethyl carbamoyl chloride	Ι	0.075	0.050	0.00089	0.33
79 – 46 – 9	2-Nitropropane	Ι	129	20	1.5	326
80 - 51 - 3	p,p'-oxybis(benzenesulfonyl hydrazide)	III	4.2	0.99	0.050	16
80 - 56 - 8	Pinene (alpha)	II	558	372	6.6	2420

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual <i>De Minimis</i> (lbs/yr)
80-62-6	Methyl methacrylate	Ι	732	700	8.7	3174
81 - 81 - 2	Warfarin, inhalable fraction	Ι	0.036	0.024	0.00042	0.15
82 - 68 - 8	Pentachloronitrobenzene	Ι	1.8	1.2	0.021	7.8
83 - 26 - 1	Pindone	Ι	0.36	0.24	0.0043	1.6
83 - 79 - 4	Rotenone	Ι	18	12	0.21	78
84 - 66 - 2	Diethyl phthalate	II	25	17	0.30	108
84 - 74 - 2	Dibutyl phthalate	II	25	17	0.30	108
85 - 00 - 7	Diquat dibromide, inhalable fraction (see Diquat, inhalable fraction)	Ι	1.8	1.2	0.021	7.8
85-00-7	Diquat dibromide, respirable fraction	Ι	0.36	0.24	0.0042	1.5
85 - 01 - 8	Phenanthrene (as coal tar pitch volatile)	Ι	0.71	0.48	0.0084	3.1
85 - 42 - 7	Hexahydrophthalic anhydride, inhalable fraction and vapor	II	0.0025	0.0017	0.000030	0.011
85 - 44 - 9	Phthalic anhydride	Ι	22	15	0.26	95
86 - 50 - 0	Azinphos-methyl, inhalable fraction and vapor	Ι	0.71	0.48	0.0084	3.1
86-74-8	Carbazole (as coal tar pitch volatile)	Ι	0.71	0.48	0.0085	3.1
86 - 88 - 4	ANTU	Ι	1.1	0.71	0.013	4.8
87 - 68 - 3	Hexachlorobutadiene	Ι	1.1	0.50	0.013	4.8
87 - 86 - 5	Pentachlorophenol, inhalable fraction and vapor	Ι	1.8	1.2	0.021	7.8
88 - 06 - 2	2,4,6-Trichlorophenol	Ι	3.0	3.0	0.036	13
88 - 12 - 0	N-Vinyl-2-pyrrolidone	II	3.4	2.3	0.040	15
88 - 72 - 2	2-Nitrotoluene	Ι	39	26	0.46	169

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual De Minimis (lbs/yr)
88 - 89 - 1	Picric acid	II	0.50	0.34	0.0059	2.2
89 - 72 - 5	o-sec-Butylphenol	II	218	104	2.6	945
90 - 04 - 0	o-Anisidine	II	2.5	1.7	0.030	11
90 - 12 - 0	1-Methyl naphthalene	II	15	9.7	0.18	65
91 - 08 - 7	2,6-Toluene diisocyanate, inhalable fraction and vapor (or as TDI mixture)	Ι	0.025	0.017	0.00030	0.11
91 - 15 - 6	o-Phthalodinitrile, inhalable fraction and vapor	II	7.0	3.4	0.084	31
91 - 20 - 3	Naphthalene	Ι	186	3.0	2.2	49
91 - 22 - 5	Quinoline	Ι	0.0029	0.0029	0.000034	0.013
91 - 57 - 6	2-Methyl naphthalene	II	15	9.7	0.18	65
91 - 59 - 8	ß-Naphthlamamine	Ι	0.018	0.012	0.00021	0.078
91 – 94 – 1	3,3-Dichlorobenzidine	Ι	0.078	0.078	0.00093	0.34
92 - 52 - 4	Biphenyl	Ι	4.6	3.1	0.055	20
92 - 67 - 1	4-Aminodiphenyl	Ι	0.025	0.016	0.00030	0.11
92 - 84 - 2	Phenothiazine	II	35	17	0.42	152
92 - 87 - 5	Benzidine	Ι	0.0010	0.0010	0.000012	0.0043
92 - 93 - 3	4-Nitrodiphenyl	Ι				Е
93 - 76 - 5	2,4,5-T	Ι	36	24	0.43	156
94 - 36 - 0	Benzoyl peroxide	II	25	17	0.30	108
94 - 75 - 7	2,4-D, inhalable fraction	Ι	36	24	0.43	156
95 - 13 - 6	Indene	III	353	236	4.2	1531

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual De Minimis (lbs/yr)
95 - 47 - 6	o-Xylene	Ι	1550	100	18	1628
95 - 48 - 7	o-Cresol, inhalable fraction and vapor	Ι	71	48	0.84	308
95 - 49 - 8	o-Chlorotoluene	Ι	925	617	11	4011
95 - 50 - 1	o-Dichlorobenzene	Ι	536	357	6.4	2324
95 - 53 - 4	o-Toluidine	Ι	31	21	0.37	134
95 - 54 - 5	o-Phenylenediamine	Ι	0.36	0.24	0.0043	1.6
95 - 63 - 6	1,2,4-Trimethylbenzene (as Trimethylbenzene)	II	618	60	7.3	977
95 - 80 - 7	Toluene-2,4-diamine	Ι	7.1	4.8	0.084	31
96 - 12 - 8	1,2-Dibromo-3- chloropropane	Ι	0.20	0.20	0.0024	0.87
96 - 18 - 4	1,2,3-Trichloropropane	Ι	0.30	0.30	0.0036	1.3
96 - 22 - 0	Diethyl ketone	II	4965	2364	59	21531
96 - 33 - 3	Methyl acrylate	II	35	23	0.42	152
96 - 45 - 7	Ethylene thiourea	Ι	0.97	0.97	0.012	4.2
97 – 77 – 8	Disulfiram	Ι	7.1	4.8	0.084	31
98 - 00 - 0	Furfuryl alcohol	II	282	134	3.4	1223
98 – 01 – 1	Furfural	II	40	26	0.48	173
98 - 07 - 7	Benzotrichloride	Ι	0.0030	0.0030	0.000036	0.013
98 - 51 - 1	p-tert-Butyl toluene	II	31	20	0.37	134
98 - 82 - 8	Cumene	II	1237	400	15	5364
98 - 83 - 9	alpha – Methyl styrene	II	173	115	2.1	750
98 - 86 - 2	Acetophenone (including benzene from gasoline)	II	246	164	2.9	1067

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98 - 88 - 4	Benzoyl chloride	II	14	9.4	0.17	61
98 - 95 - 3	Nitrobenzene	Ι	18	9.0	0.21	78
99 - 08 - 1	m-Nitrotoluene	Ι	39	26	0.46	169
99 - 55 - 8	5-Nitro-o-toluidine, inhalable fraction	Π	5.0	3.4	0.060	22
99 - 65 - 0	1,3-Dinitrobenzene	Ι	3.6	2.4	0.043	16
99 – 99 – 0	p-Nitrotoluene	Ι	39	26	0.46	169
100 - 00 - 5	p-Nitrochlorobenzene	Ι	2.3	1.5	0.027	10
100 - 01 - 6	p-Nitroaniline	Ι	11	7.1	0.13	48
100 - 21 - 0	Terephthalic acid	Π	50	34	0.59	217
100 - 25 - 4	1,4-Dinitrobenzene	II	5.0	3.4	0.059	22
100 - 37 - 8	2-Diethylaminoethanol	II	48	32	0.57	208
100 - 40 - 3	4-Vinyl cyclohexene	II	2.2	1.5	0.026	9.5
100 - 41 - 4	Ethyl benzene	Ι	1000	1000	12	4336
100 - 42 - 5	Styrene, monomer	Ι	1000	1000	12	4336
100 - 44 - 7	Benzyl chloride	Ι	19	12	0.23	82
100 - 61 - 8	N-methyl aniline	III	92	22	1.1	358
100 - 63 - 0	Phenylhydrazine	II	2.2	1.5	0.026	9.5
100 - 74 - 3	N-Ethylmorpholine	II	169	80	2.0	733
101 - 14 - 4	4,4-Methylene bis (2- chloroaniline)	Ι	0.39	0.26	0.0046	1.7
101 - 68 - 8	Methylene bisphenyl isocyanate	Ι	0.18	0.020	0.0021	0.33
101 – 77 – 9	4,4-Methylene dianiline	II	4.1	2.7	0.049	18

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102 - 54 - 5	Dicyclopentadienyl iron, as Fe	Π	50	34	0.59	217
102 - 71 - 6	Triethanolamine	II	25	17	0.30	108
102 - 81 - 8	2-N-Dibutylaminoethanol	II	18	12	0.21	78
103-71-9	Phenyl isocyanate	Ι	0.087	0.058	0.0010	0.38
104 - 94 - 9	p-Anisidine	II	2.5	1.7	0.030	11
105 - 60 - 2	Caprolactam, inhalable fraction and vapor	Ι	18	12	0.21	78
106 - 42 - 3	p-Xylene	Ι	1550	100	18	1628
106 - 44 - 5	p-Cresol, inhalable fraction and vapor	Ι	71	48	0.84	308
106 - 46 - 7	p-Dichlorobenzene	Ι	800	800	9.5	3469
106 - 49 - 0	p-Toluidine	II	44	30	0.52	191
106 - 50 - 3	p-Phenylenediamine	II	0.50	0.34	0.0059	2.2
106 - 51 - 4	Quinone	Ι	1.6	1.0	0.019	6.9
106 - 87 - 6	Vinyl cyclohexene dioxide	Ι	2.0	1.4	0.024	8.7
106 - 88 - 7	1,2-Epoxybutane	Ι	20	20	0.24	87
106 - 89 - 8	Epichlorohydrin	Ι	6.8	1.0	0.081	16
106 - 92 - 3	Allyl glycidyl ether	II	23	16	0.27	100
106 - 93 - 4	Ethylene dibromide	Ι	0.050	0.050	0.00059	0.22
106 - 94 - 5	1-Bromopropane	Ι	1.8	1.2	0.021	7.8
106 - 95 - 6	Allyl bromide	Ι	2.5	1.2	0.029	11
106-98-9	1-Butene	II	2886	1924	34	12515
106 - 99 - 0	1,3-Butadiene	Ι	2.0	2.0	0.024	8.7
107-01-7	2-Butene	Π	2886	1924	34	12515

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107 - 02 - 8	Acrolein	Ι	0.82	0.020	0.0097	0.33
107 – 05 – 1	Allyl chloride	Ι	11	1.0	0.13	16
107 - 06 - 2	Ethylene dichloride	Ι	143	95	1.7	620
107 – 07 – 3	Ethylene chlorohydrin	Ι	12	7.9	0.14	52
107 – 13 – 1	Acrylonitrile	Ι	15	2.0	0.18	33
107 – 15 – 3	Ethylenediamine	II	176	84	2.1	763
107 - 18 - 6	Allyl alcohol	Ι	4.3	2.9	0.051	19
107 – 19 – 7	Propargyl alcohol	Ι	8.2	5.5	0.097	36
107 - 20 - 0	Chloroacetaldehyde	II	16	11	0.19	69
107 – 21 – 1	Ethylene glycol, aerosol	II	503	335	6.0	2181
107 - 22 - 2	Glyoxal, inhalable fraction and vapor	II	0.70	0.34	0.0083	3.0
107 - 30 - 2	Chloromethyl methyl ether	Ι				Ε
107-31-3	Methyl formate	III	2558	1218	30	11094
107 - 49 - 3	Tetraethyl pyrophosphate (TEPP), inhalable fraction and vapor	Ι	0.036	0.024	0.00043	0.16
107 - 98 - 2	1-Methoxy-2-propanol	II	2000	2000	24	8673
108 - 01 - 0	N-Dimethylaminoethanol	II	91	60	1.1	395
108 - 03 - 2	1-Nitropropane	II	458	305	5.4	1986
108 - 05 - 4	Vinyl acetate	Ι	200	200	2.4	867
108 - 08 - 7	2,4-Dimethylpentane (see Heptane, all isomers, CAS# 142-82-5)					
108 - 10 - 1	Methyl isobutyl ketone (MIBK)	Ι	3000	3000	36	13009
108 - 18 - 9	Diisopropylamine	II	148	70	1.8	642

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108 - 24 - 7	Acetic anhydride	Ι	21	10	0.25	91
108 - 31 - 6	Maleic anhydride, inhalable fraction and vapor	Π	0.050	0.034	0.00059	0.22
108 - 38 - 3	m-Xylene	Ι	1550	100	18	1628
108 - 39 - 4	m-Cresol, inhalable fraction and vapor	Ι	71	48	0.84	308
108 - 44 - 1	m-Toluidine	II	44	30	0.52	191
108 - 45 - 2	m-Phenylenediamine	Ι	0.36	0.24	0.0043	1.6
108 - 46 - 3	Resorcinol	II	226	151	2.7	980
108 - 67 - 8	1,3,5-Trimethylbenzene (as Trimethylbenzene)	Π	618	60	7.3	977
108 - 88 - 3	Toluene	Ι	5000	5000	59	21682
108 - 90 - 7	Chlorobenzene	II	231	154	2.7	1002
108 - 91 - 8	Cyclohexylamine	Ι	146	98	1.7	633
108 - 93 - 0	Cyclohexanol	Ι	736	490	8.7	3192
108 – 94 – 1	Cyclohexanone	II	404	269	4.8	1752
108 - 95 - 2	Phenol	Ι	68	45	0.81	295
108 - 98 - 5	Phenyl mercaptan	Ι	1.6	1.1	0.019	6.9
109 - 59 - 1	2-Isopropoxyethanol	II	746	355	8.9	3235
109 - 73 - 9	n-Butylamine	II	75	50	0.89	325
109 - 79 - 5	n-Butyl mercaptan	Ι	9.0	4.3	0.11	39
109 - 86 - 4	2-Methoxyethanol (EGME)	Ι	20	20	0.24	87
109 - 87 - 5	Methylal	II	15644	10429	186	67840
109 - 89 - 7	Diethylamine	Π	75	50	0.89	325

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109 - 90 - 0	Ethyl isocyanate	Ι	0.29	0.14	0.0030	1.3
109 - 99 - 9	Tetrahydrofuran	II	2000	2000	24	8673
110 - 49 - 6	2-Methoxyethyl acetate (EGMEA)	Ι	1.7	1.2	0.020	7.4
110 - 54 - 3	n-Hexane	II	885	700	11	3838
110 - 62 - 3	n-Valeraldehyde	II	1239	590	15	5373
110 - 80 - 5	2-Ethoxyethanol (EGEE)	Ι	200	200	2.4	867
110 - 82 - 7	Cyclohexane	II	6000	6000	71	26019
110 - 83 - 8	Cyclohexene	II	5080	3387	60	22029
110 - 85 - 0	Piperazine and salts (as piperazine), inhalable fraction and vapor	Ι	0.50	0.24	0.0059	2.2
110 - 86 - 1	Pyridine	Π	16	11	0.19	69
110 - 91 - 8	Morpholine	II	357	238	4.2	1548
111 - 15 - 9	2-Ethoxyethyl acetate (EGEEA)	Ι	96	64	1.1	416
111 - 30 - 8	Glutaraldehyde	Ι	0.71	0.48	0.0084	3.1
111 - 40 - 0	Diethylene triamine	Ι	21	10	0.25	91
111 - 42 - 2	Diethanolamine, inhalable fraction and vapor	Ι	3.6	2.4	0.042	15
111 - 44 - 4	Dichloroethyl ether	Ι	104	69	1.2	451
111 - 65 - 9	Octane, all isomers	Ι	7000	3333	83	30355
111 - 69 - 3	Adiponitrile	Ι	44	21	0.52	191
111 - 76 - 2	2-Butoxyethanol	Ι	1600	1600	19	6938
112 - 07 - 2	2-Butoxyethyl acetate	II	659	439	7.8	2858
112-34-5	Diethylene glycol monobutyl ether (DGME), inhalable fraction and vapor	III	1382	658	16	5994

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112 - 55 - 0	Dodecyl mercaptan	Ι	3.0	2.0	0.036	13
114 - 26 - 1	Propoxur, inhalable fraction and vapor	Ι	1.8	1.2	0.021	7.7
115 – 11 – 7	Isobutene	II	2886	1924	34	12515
115 - 29 - 7	Endosulfan, inhalable fraction and vapor	Ι	0.36	0.24	0.0043	1.6
115 - 77 - 5	Pentaerythritol	II	50	34	0.59	217
115 - 90 - 2	Fensulfothion, inhalable fraction and vapor	Ι	0.036	0.024	0.00043	0.16
116 - 14 - 3	Tetrafluoroethylene	III	171	81	2.0	742
116 – 15 – 4	Hexafluoropropylene	II	4.3	2.1	0.051	19
117 - 81 - 7	Di(2-ethyl hexyl)phthalate	Ι	18	12	0.21	78
118 - 52 - 5	1,3-Dichloro-5,5-dimethyl hydantoin	II	1.4	0.67	0.017	6.1
118 – 74 – 1	Hexachlorobenzene	Ι	0.0070	0.0050	0.000083	0.030
118 - 96 - 7	2,4,6-Trinitrotoluene	II	0.50	0.34	0.0059	2.2
119 - 93 - 7	o-Tolidine	Ι	0.071	0.048	0.00084	0.31
120-12-7	Anthracene (as coal tar pitch volatiles)	Ι	0.71	0.48	0.0085	3.1
120 - 80 - 9	Catechol	II	116	77	1.4	503
120 - 82 - 1	1,2,4-Trichlorobenzene	II	186	124	2.2	807
121 - 14 - 2	2,4-Dinitrotoluene	Ι	0.051	0.051	0.00061	0.22
121 - 44 - 8	Triethylamine	II	10	7.0	0.12	45
121 - 45 - 9	Trimethyl phosphite	Ι	50	24	0.59	217
121 - 69 - 7	Dimethylaniline	II	126	84	1.5	546
121 - 75 - 5	Malathion, inhalable fraction and vapor	Ι	3.6	2.4	0.043	16

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121 - 82 - 4	Cyclonite	Ι	1.8	1.2	0.021	7.8
122-34-9	Simazine inhalable fraction	Ι	1.8	1.2	0.021	7.7
122 - 39 - 4	Diphenylamine	II	50	34	0.59	217
122 - 60 - 1	Phenyl glycidyl ether (PGE)	Ι	2.1	1.4	0.025	9.1
122 - 66 - 7	1,2-Diphenylhydrazine	Ι	0.050	0.050	0.00059	0.22
123 - 31 - 9	Hydroquinone	Ι	3.6	2.4	0.043	16
123 - 38 - 6	Propionaldehyde	II	239	8.0	2.8	130
123 - 42 - 2	Diacetone alcohol	II	1197	798	14	5191
123 - 51 - 3	Isoamyl alcohol	II	1816	1211	22	7875
123 - 54 - 6	2,4-Pentanedione	Ι	366	244	4.3	1587
123 - 86 - 4	n-Butyl acetate	Π	1673	797	20	7254
123 - 91 - 1	1,4-Dioxane	Ι	258	30	3.1	488
124 - 09 - 4	1,6-Hexanediamine	II	12	7.7	0.14	52
124 - 40 - 3	Dimethylamine	II	65	31	0.77	282
124 - 64 - 1	Tetrakis (hydroxymethyl) phosphonium chloride	II	10	6.7	0.12	43
126 - 73 - 8	Tributyl phosphate, inhalable fraction and vapor	II	25	17	0.30	108
126 - 98 - 7	Methylacrylonitrile	Ι	9.6	6.4	0.11	42
126 - 99 - 8	β-Chloroprene	Ι	129	20	1.5	326
127 - 00 - 4	1-Chloro-2-propanol	II	28	13	0.33	121
127 - 18 - 4	Perchloroethylene	Ι	607	40	7.2	651
127 - 19 - 5	N,N-Dimethylacetamide	Ι	129	86	1.5	559
127 - 91 - 3	ß-Pinene	II	558	372	6.6	2420

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128 - 37 - 0	Butylated hydroxytoluene (BHT), inhalable fraction and vapor	II	10	6.7	0.12	43
129 - 00 - 0	Pyrene (as coal tar pitch volatiles)	Ι	0.71	0.48	0.0084	3.1
131 – 11 – 3	Dimethylphthalate	II	25	17	0.30	108
133 - 06 - 2	Captan, inhalable fraction	Ι	18	12	0.21	78
135 - 88 - 6	N-Phenyl-B-naphthylamine	Ι				Е
136 - 78 - 7	Sesone	II	50	34	0.59	217
137 – 05 – 3	Methyl 2-cyanoacrylate	II	4.6	3.1	0.055	20
137 - 26 - 8	Thiram, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
140 - 11 - 4	Benzyl acetate	II	307	205	3.6	1331
140 - 88 - 5	Ethyl acrylate	Ι	71	48	0.84	308
141 - 32 - 2	n-Butyl acrylate	Ι	52	25	0.62	225
141 - 43 - 5	Ethanolamine	Ι	27	18	0.32	117
141 - 66 - 2	Dicrotophos, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
141 - 78 - 6	Ethyl acetate	II	10141	4829	120	43976
141 - 79 - 7	Mesityl oxide	II	302	201	3.6	1310
142 - 82 - 5	Heptane	II	8249	5500	98	35771
143 - 33 - 9	Sodium cyanide, as CN	Ι	18	0.80	0.21	13
144 - 62 - 7	Oxalic acid, anhydrous	Ι	3.6	2.4	0.042	15
148 - 01 - 6	3,5-Dinitro-o-tolumide	II	7.0	3.4	0.084	31
149 - 57 - 5	2-Ethylhexanoic acid, inhalable fraction and vapor	Ι	18	12	0.21	78
151 - 50 - 8	Potassium cyanide, as CN	Ι	18	0.80	0.21	13

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151 – 56 – 4	Ethylenimine	Ι	0.31	0.21	0.0037	1.4
151 - 67 - 7	Halothane	Ι	2020	962	24	8760
156 - 59 - 2	cis 1,2-Dichloroethylene	II	3989	2659	47	17298
156 - 60 - 5	trans-1,2-Dichloroethylene	II	3989	2659	47	17298
156 - 62 - 7	Calcium cyanamide	II	2.5	1.7	0.030	11
205 - 99 - 2	Benzo[b]fluoranthene	Ι	0.36	0.24	0.0043	1.6
218 - 01 - 9	Chrysene	Ι	0.36	0.24	0.0043	1.6
260-94-6	Acridine	Ι	0.71	0.48	0.0085	3.1
298 - 00 - 0	Methyl parathion, inhalable fraction and vapor	Ι	0.071	0.048	0.00084	0.31
298 - 02 - 2	Phorate, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
298 - 04 - 4	Disulfoton, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
299 - 84 - 3	Ronnel – inhalable fraction and vapor	Ι	18	12	0.21	78
299 - 86 - 5	Crufomate	Ι	18	12	0.21	78
300 - 76 - 5	Naled, inhalable fraction and vapor	Π	0.50	0.34	0.0059	2.2
302 - 01 - 2	Hydrazine	Ι	0.046	0.031	0.00055	0.20
309 - 00 - 2	Aldrin, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
314 - 40 - 9	Bromacil	Ι	36	24	0.43	156
330 - 54 - 1	Diuron	Ι	36	24	0.43	156
333 - 41 - 5	Diazinon, inhalable fraction and vapor	Ι	0.036	0.024	0.00043	0.16
334 - 88 - 3	Diazomethane	Ι	1.2	0.81	0.014	5.2
353 - 50 - 4	Carbonyl fluoride	Ι	27	13	0.32	117

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382 - 21 - 8	Perfluoroisobutylene	Ι	0.29	0.20	0.0034	1.3
409 - 21 - 2	Silicon carbide: non-fibrous (inhalable fraction)	Π	50	34	0.59	217
409 - 21 - 2	Silicon carbide: non-fibrous (respirable fraction)	II	15	10	0.18	65
420 - 04 - 2	Cyanamide	ΙΙ	14	6.7	0.17	61
431 - 03 - 8	Diacetyl	II	0.25	0.12	0.0029	1.1
460 - 19 - 5	Cyanogen	Π	54	0.80	0.64	13
463 - 51 - 4	Ketene	Ι	3.1	2.0	0.037	13
463 - 58 - 1	Carbonyl sulfide	II	87	41	1.0	377
479 - 45 - 8	Tetryl	II	7.5	5.0	0.089	33
504 - 29 - 0	2-Aminopyridine	Ι	6.8	4.5	0.081	29
506 - 64 - 9	Silver cyanide (as hydrogen cyanide)	Ι	18	12	0.21	78
506-68-3	Cyanogen bromide	Ι	6.5	4.4	0.078	28
506 - 77 - 4	Cyanogen chloride	Ι	2.7	1.8	0.032	12
509 - 14 - 8	Tetranitromethane	Ι	0.14	0.095	0.0017	0.61
526-73-8	1,2,3-Trimethylbenzene, –(as trimethylbenzene)	II	618	60	7.3	977
528 - 29 - 0	1,2-Dinitrobenzene	II	5.0	3.4	0.059	22
532 - 27 - 4	2-Chloroacetophenone	Ι	1.1	0.030	0.013	0.49
534 - 52 - 1	4,6-Dinitro-o-cresol	Ι	0.71	0.48	0.0084	3.1
540 - 59 - 0	1,2-Dichloroethylene, all isomers	III	16521	7867	196	71643
542 - 56 - 3	Isobutyl nitrite, inhalable fraction and vapor	II	24	14	0.29	104
542 - 75 - 6	1,3-Dichloropropene	Ι	20	20	0.24	87

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542 - 88 - 1	bis(Chloromethyl) ether	Ι	0.017	0.011	0.00020	0.074
542 - 92 - 7	Cyclopentadiene	II	1021	681	12	4428
552 - 30 - 7	Trimetallic anhydride, inhalable fraction and vapor	ΙΙ	0.0030	0.0020	0.000036	0.013
556 - 52 - 5	Glycidol	Ι	30	15	0.36	130
557 - 05 - 1	Zinc stearate	III	149	99	1.8	646
558 - 13 - 4	Carbon tetrabromide	III	21	14	0.25	91
563 - 12 - 2	Ethion, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
563 - 80 - 4	Methyl isopropyl ketone	Ι	352	168	4.2	1526
565 - 59 - 3	2,3-Dimethylpentane (see Heptane, all isomers, CAS# 142-82-5)					
584 - 84 - 9	Toluene-2,4-diisocyanate, inhalable fraction and vapor (or as TDI mixture)	Ι	0.025	0.017	0.00030	0.11
589 - 34 - 4	3-Methylhexane (see Heptane, all isomers, CAS# 142-82-5)					
590-18-1	Cis-2-Butene	II	2886	1924	34	12515
590 - 35 - 2	2,2-Dimethylpentane (see Heptane, all isomers, CAS# 142-82-5)					
591 - 76 - 4	2-Methylhexane (see Heptane, all isomers, CAS# 142-82-5)					
591 - 78 - 6	Methyl-n-butyl ketone	II	101	30	1.2	438
592 - 01 - 8	Calcium cyanide (as CN)	Ι	18	0.80	0.21	13
593 - 60 - 2	Vinyl bromide	Ι	7.9	3.0	0.094	34
594 - 42 - 3	Perchloromethyl mercaptan	Ι	2.7	1.8	0.032	12
594 - 72 - 9	1,1-Dichloro-1-nitroethane	II	85	40	1.0	369

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598 - 78 - 7	2-Chloropropionic acid	Ι	2.2	1.0	0.026	9.5
600 - 25 - 9	1-Chloro-1-nitropropane	Π	70	34	0.83	304
624-64-6	Trans-2-Butene	II	2886	1924	34	12515
624 - 83 - 9	Methyl isocyanate	Ι	0.17	0.11	0.0020	0.73
624 - 92 - 0	Dimethyl disulfide	Π	9.7	6.5	0.12	42
626 - 17 - 5	m-Phthalodinitrile, inhalable fraction and vapor	II	25	17	0.30	108
628 - 96 - 6	Ethylene glycol dinitrate	II	4.4	1.0	0.052	16
637 - 92 - 3	Ethyl tert-butyl ether (ETBE)	Π	736	350	8.7	3192
638 – 21 – 1	Phenylphosphine	Ι	0.82	0.55	0.0097	3.6
646 - 06 - 0	1,3-Dioxolane	II	427	203	5.1	1852
681 - 84 - 5	Methyl silicate	Ι	21	14	0.25	91
684 - 16 - 2	Hexafluoroacetone	Ι	2.4	1.6	0.029	10
688 - 73 - 3	tri-N-Butylstannane hydride (as tin)	Ι	0.36	0.24	0.0043	1.6
764 - 41 - 0	1,4-Dichloro-2-butene	Ι	0.089	0.060	0.0011	0.39
768 - 52 - 5	N-Isopropylaniline	Π	77	37	0.91	334
822 - 06 - 0	Hexamethylene diisocyanate	Ι	0.12	0.010	0.0014	0.16
872 - 50 - 4	n-Methyl-2-pyrrolidone	Ι	1429	952	17	6197
919 - 86 - 8	Demeton-S-methyl, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
944 - 22 - 9	Fonofos – inhalable fraction and vapor	Ι	0.036	0.024	0.00043	0.16
994 - 05 - 8	tert-Amyl methyl ether (TAME)	II	421	280	5.0	1826
999 - 61 - 1	2-Hydroxypropyl acrylate	Ι	14	6.7	0.17	61

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1024 - 57 - 3	Heptachlor epoxide	Ι	0.18	0.12	0.0021	0.78
1120 - 71 - 4	Propane sultone	Ι				Е
1300 - 73 - 8	Xylidine (mixed isomers), inhalable fraction and vapor	II	13	8.4	0.15	56
1303 - 00 - 0	Gallium arsenide, respirable fraction	Ι	0.0010	0.0010	0.000012	0.0043
1303 - 96 - 4	Borate compounds (Borax) – inhalable fraction	Ι	7.1	4.8	0.084	31
1304 - 28 - 5	Barium oxide (as barium)	II	2.5	1.7	0.030	11
1304 - 56 - 9	Beryllium oxide (as beryllium)	Ι	0.0071	0.0048	0.000084	0.031
1304 - 82 - 1	Bismuth telluride Se-doped, as $Bi_2Te_3$	II	25	17	0.30	108
1305 - 62 - 0	Calcium hydroxide	III	104	50	1.2	451
1306 - 19 - 0	Cadmium oxide (as cadmium, respirable)	Ι	0.0070	0.0050	0.000083	0.030
1309 - 37 - 1	Iron oxide (Fe <sub>2</sub> O <sub>3</sub> ) – respirable fraction	II	25	17	0.30	108
1309 - 64 - 4	Antimony trioxide	Ι	1.8	0.20	0.021	3.3
1310 - 58 - 3	Potassium hydroxide	II	11	6.7	0.13	48
1313 - 13 - 9	Manganese dioxide (as manganese)	II	1.0	0.67	0.012	4.3
1313 - 99 - 0	Nickel monoxide (as nickel, soluble compound), inhalable fraction	Ι	0.36	0.24	0.0043	1.6
1314 - 06 - 3	Nickel peroxide (as nickel, soluble compound), inhalable fraction	Ι	0.36	0.24	0.0043	1.6
1314 - 13 - 2	Zinc oxide, respirable fraction	II	50	34	0.59	217
1314 - 62 - 1	Vanadium pentoxide as Va, inhalable fraction	Ι	0.18	0.12	0.0021	0.78
1314 - 80 - 3	Phosphorus pentasulfide	II	5.0	3.4	0.059	22

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1317 - 36 - 8	Lead monoxide (as lead)	Ι	0.18	0.12	0.0021	0.78
1317 - 39 - 1	Copper (I) oxide (as copper, dust/mists)	Ι	3.6	2.4	0.043	16
1317 – 95 – 9	Silica, Crystalline – Tripoli, respirable fraction	Ι	0.089	0.060	0.0011	0.39
1319 - 77 - 3	Cresol, all isomers, inhalable fraction and vapor	Ι	71	48	0.84	308
1321 - 64 - 8	Pentachloronaphthalene	II	2.5	1.7	0.030	11
1321 - 65 - 9	Trichloronaphthalene	II	25	17	0.30	108
1330 - 20 - 7	Xylene	Ι	1550	100	18	1628
1330 - 43 - 4	Borate compounds (sodium tetraborate) – inhalable fraction	Ι	7.1	4.8	0.084	31
1332 - 58 - 7	Kaolin, containing no asbestos, respirable fraction	Π	10	6.7	0.12	43
1333 - 82 - 0	Chromium (VI) oxide (1:3) (as CrVI, insol.)	Ι	0.036	0.024	0.00043	0.16
1335 - 87 - 1	Hexachloronaphthalene	III	3.0	2.0	0.036	13
1335 - 88 - 2	Tetrachloronaphthalene	Π	10	6.7	0.12	43
1336 - 36 - 3	Polychlorinated biphenyls (Aroclors)	Ι	0.10	0.10	0.0012	0.43
1338 - 23 - 4	Methyl ethyl ketone peroxide	Ι	5.4	3.6	0.064	23
1344-95-2	Calcium silicate, naturally occurring as Wollastonite Inhalable fraction containing no asbestos and <1% crystalline silica	II	5.0	3.4	0.060	22
1395 - 21 - 7	Subtilisins as crystalline active enzyme	Π	0.00030	0.00020	0.000012	0.0043
1563 - 66 - 2	Carbofuran, inhalable fraction and vapor	Ι	0.36	0.24	0.0043	1.6
1582 - 09 - 8	Trifluraline	Ι	4.6	4.6	0.055	20
1634 - 04 - 4	Methyl-tert butyl ether	II	3000	3000	36	13009

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1746 - 01 - 6	2,3,7,8- Tetrachlorodibenzeno-p- Dioxin	Ι	2.3E-7	2.3E-7	2.7E-9	1.0E-6
1910 - 42 - 5	Paraquat dichloride, respirable fraction	Ι	0.36	0.24	0.0043	1.6
1910 - 42 - 5	Paraquat dichloride, total dust	Ι	1.8	1.2	0.021	7.8
1912 - 24 - 9	Atrazine (and related symmetrical triazines), inhalable fraction	Ι	7.1	4.8	0.085	31
1918 – 02 – 1	Picloram	II	50	34	0.59	217
1929 - 82 - 4	Nitrapyrin	Ι	50	24	0.59	217
2039-87-4	o-Chlorostyrene	III	4218	2812	50	18290
2074 - 50 - 2	Paraquat Dimethyl sulfate, resp. fraction	Ι	0.36	0.24	0.0043	1.6
2074 - 50 - 2	Paraquat Dimethyl sulfate, total dust	Ι	1.8	1.2	0.021	7.8
2104 - 64 - 5	EPN, inhalable fraction	Ι	0.36	0.24	0.0043	1.6
2179 - 59 - 1	Allyl propyl disulfide	II	45	30	0.53	195
2234 - 13 - 1	Octachloronaphthalene	III	1.5	0.99	0.018	6.5
2238 - 07 - 5	Diglycidyl ether (DGE)	Ι	0.19	0.13	0.0023	0.82
2425 - 06 - 1	Captafol	Ι	0.36	0.24	0.0043	1.6
2426 - 08 - 6	n-Butyl glycidyl ether (BGE)	Ι	57	38	0.68	247
2451 - 62 - 9	1,3,5-Triglycidyl-s- triazinetrione	Ι	0.18	0.12	0.0021	0.78
2528 - 36 - 1	Dibutyl phenyl phosphate	II	18	12	0.21	78
2698 - 41 - 1	o-Chlorobenzylidene malononitrile	Ι	1.6	0.93	0.019	6.9
2699 - 79 - 8	Sulfuryl fluoride	Ι	75	50	0.89	325
2764 - 72 - 9	Diquat, inhalable fraction	Ι	1.8	1.2	0.021	7.8

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2764 - 72 - 9	Diquat, respirable fraction	Ι	0.36	0.24	0.0042	1.5
2921 - 88 - 2	Chlorpyrifos, inhalable fraction and vapor	Ι	0.36	0.24	0.0043	1.6
3033 - 62 - 3	bis(2-dimethylaminoethyl) ether (DMAEE)	Ι	1.6	0.78	0.019	6.9
3333 - 52 - 6	Tetramethyl succinonitrile	Ι	10	6.7	0.12	43
3383 - 96 - 8	Temephos, inhalable fraction and vapor	II	5.0	3.4	0.059	22
3689 - 24 - 5	Sulfotep (TEDP), inhalable fraction and vapor	Ι	0.36	0.24	0.0043	1.6
3710-84-7	N,N- Diethylhydroxylamine	Ι	36	17	0.43	156
3825 - 26 - 1	Ammonium perfluorooctanoate	Ι	0.050	0.024	0.00059	0.22
4016 - 14 - 2	Isopropyl glycidyl ether (IGE)	II	1197	798	14	5191
4098 - 71 - 9	Isophorone diisocyanate	Ι	0.16	0.11	0.0019	0.69
4170 - 30 - 3	Crotonaldehyde	Ι	3.1	2.0	0.037	13
4685 - 14 - 7	Paraquat, respirable fraction	Ι	0.36	0.24	0.0043	1.6
4685 - 14 - 7	Paraquat, total dust	Ι	1.8	1.2	0.021	7.8
5124 - 30 - 1	Methylene bis(4- cyclohexylisocyanate)	III	0.80	0.54	0.0095	3.5
5392 - 40 - 5	Citral, inhalable fraction and vapor	Ι	89	60	1.1	386
5714 - 22 - 7	Sulfur pentafluoride	Ι	0.40	0.24	0.0048	1.7
6153-56-6	Oxalic acid, dihydrate	Ι	3.6	2.4	0.042	15
6385 - 62 - 2	Diquat dibromide monohydrate, inhalable fraction (see Diquat, inhalable fraction, CAS# 2764-72-9)					
6385-62-2	Diquat dibromide monohydrate, respirable fraction (see Diquat					

6385-62-2 fraction (see Diquat, respirable fraction, CAS# 2764-72-9)

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6423 - 43 - 4	Propylene glycol dinitrate	II	1.7	1.1	0.020	7.4
6923 - 22 - 4	Monocrotophos, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
7429 - 90 - 5	Aluminum metal and insoluble compounds – respirable fraction	Π	5.0	3.4	0.059	22
7439 - 92 - 1	Lead, and inorganic compounds as Pb	Ι	0.15	0.12	0.0018	0.65
7439 - 96 - 5	Manganese, elemental, as Mn, respirable fraction	II	0.10	0.050	0.0012	0.44
7439 - 96 - 5	Manganese, inorganic compounds, as Mn, respirable fraction	II	0.50	0.050	0.0060	0.81
7439 – 97 – 6	Mercury, aryl compounds	Ι	0.36	0.30	0.0043	1.6
7439 – 97 – 6	Mercury, alkyl compounds	Ι	0.30	0.30	0.0036	1.3
7439 - 97 - 6	Mercury, elemental and inorganic forms	Ι	0.30	0.30	0.0036	1.3
7439 – 98 – 7	Molybdenum, as Mo; (metal and insoluble) – inhalable	Ι	36	24	0.43	156
7439 - 98 - 7	Molybdenum, as Mo; (metal and insoluble) – respirable	Ι	11	7.1	0.13	48
7439 - 98 - 7	Molybdenum, as Mo; (soluble compounds) – respirable	Ι	1.8	1.2	0.021	7.8
7440 - 02 - 0	Nickel, insoluble, inorganic compounds, as Ni, inhalable fraction	Ι	3.6	2.4	0.043	16
7440 - 02 - 0	Nickel, elemental, as Ni, inhalable fraction	Ι	3.6	2.4	0.043	16
7440 - 02 - 0	Nickel, soluble inorganic compounds, as Ni, inhalable fraction	Ι	0.36	0.24	0.0043	1.6
7440-06-4	Platinum metal	Ι	5.0	3.4	0.060	22
7440 - 06 - 4	Platinum, soluble salts, as Pt	II	0.010	0.0070	0.00012	0.043
7440 - 16 - 6	Rhodium, soluble compounds	II	0.050	0.034	0.00059	0.22
7440 - 22 - 4	Silver metal, dust and fume	II	0.50	0.34	0.0059	2.2

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7440 - 22 - 4	Silver and compounds as Ag, soluble compounds	II	0.050	0.034	0.00059	0.22
7440 - 28 - 0	Thallium and compounds, as Tl, inhalable fraction	Ι	0.071	0.048	0.00084	0.31
7440 - 31 - 5	Tin, metal	II	10	6.7	0.12	43
7440 - 31 - 5	Tin, organic compounds, as Sn	Ι	0.36	0.24	0.0043	1.6
7440 - 31 - 5	Tin, oxide/inorganic compounds (not- SnH4, as Sn)	II	10	6.7	0.12	43
7440 - 33 - 7	Tungsten metal and insoluble compounds, as W	Ι	18	12	0.21	78
7440 - 33 - 7	Tungsten, soluble compounds, as W	Ι	5.0	2.4	0.059	22
7440 - 36 - 0	Antimony and compounds, as Sb	Ι	1.8	1.2	0.21	7.8
7440 - 38 - 2	Arsenic and inorganic compounds, as As	Ι	0.036	0.024	0.00043	0.16
7440 - 39 - 3	Barium and soluble compounds, as Ba	II	2.5	1.7	0.030	11
7440 - 41 - 7	Beryllium and compounds, as Be, inhalable fraction	Ι	0.18	0.020	0.0021	0.033
7440 - 43 - 9	Cadmium and compounds, as Cd, respirable fraction	Ι	0.0071	0.0048	0.000085	0.031
7440 - 47 - 3	Chromium, insoluble (CrVI compounds)	Ι	0.036	0.024	0.00043	0.16
7440 - 47 - 3	Chromium metal and Cr III compounds	Ι	1.8	1.2	0.021	7.8
7440 - 47 - 3	Chromium, water soluble (CrVI)	Ι	0.18	0.12	0.0021	0.78
7440 - 48 - 4	Hard metal containing Cobalt and Tungsten carbide, as Co, thoracic particulate matter	Ι	0.018	0.012	0.00021	0.077
7440 - 50 - 8	Copper, dusts and mists, as Cu	Ι	3.6	2.4	0.043	16
7440 - 50 - 8	Copper, fume	Ι	0.71	0.48	0.0084	3.1

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7440 - 58 - 6	Hafnium and compounds, as Hf	III	7.4	5.0	0.088	32
7440 - 61 - 1	Uranium (natural) soluble and insoluble, as U	Ι	0.71	0.48	0.0084	3.1
7440 - 65 - 5	Yttrium and compounds, as Y	III	15	9.9	0.18	65
7440 - 74 - 6	Indium and compounds, as In	Ι	0.36	0.24	0.0043	1.6
7553 - 56 - 2	Iodine and Iodides, inhalable fraction and vapor	II	0.37	0.25	0.0044	1.6
7572 - 29 - 4	Dichloroacetylene	Ι	1.4	0.93	0.017	6.1
7580 - 67 - 8	Lithium hydride, inhalable fraction	III	0.83	0.50	0.0099	3.6
7616 - 94 - 6	Perchloryl fluoride	II	65	44	0.77	282
7631 - 90 - 5	Sodium bisulfite	II	25	17	0.30	108
7637 – 07 – 2	Boron trifluoride	Ι	1.0	0.68	0.012	4.4
7646 - 85 - 7	Zinc chloride fume	Ι	3.6	2.4	0.043	16
7647 - 01 - 0	Hydrogen chloride	Ι	20	20	0.24	87
7664 - 39 - 3	Hydrogen fluoride, as F	Ι	1.5	0.98	0.018	6.5
7664 – 41 – 7	Ammonia	II	500	500	5.9	2168
7664 - 93 - 9	Sulfuric acid	Ι	0.71	0.48	0.0084	3.1
7681 - 49 - 4	Sodium fluoride (as fluoride)	Ι	8.9	6.0	0.11	39
7681 – 57 – 4	Sodium metabisulfite	II	35	17	0.42	152
7697 – 37 – 2	Nitric acid	Ι	19	12	0.23	82
7705 - 08 - 0	Ferric chloride (as iron, soluble salt)	II	5.0	3.4	0.059	22
7719 - 09 - 7	Thionyl chloride	II	3.9	2.3	0.046	17
7719 - 12 - 2	Phosphorus trichloride	Ι	3.9	2.6	0.046	17

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7720-78-7	Ferrous sulfate (Iron salts, soluble, as Fe)	Ι	5.0	2.4	0.059	22
7722 - 64 - 7	Potassium permanganate (as manganese)	Π	1.0	0.67	0.012	4.3
7722 - 84 - 1	Hydrogen peroxide	II	9.9	4.7	0.12	43
7726 - 95 - 6	Bromine	II	3.3	2.2	0.039	14
7758 - 94 - 3	Ferrous chloride (as iron, soluble salt)	II	5.0	3.4	0.059	22
7758 – 97 – 6	Lead chromate, as Cr	Ι	0.043	0.029	0.00051	0.19
7758-97-6	Lead chromate, as Pb	Ι	0.18	0.12	0.0021	0.77
7775 – 27 – 1	Sodium persulfate	III	2.1	0.99	0.025	9.1
7782 - 41 - 4	Fluorine	Ι	5.7	3.8	0.068	25
7782 - 42 - 5	Graphite (all forms except graphite fibers), respirable fraction	Π	28	6.7	0.33	109
7782 - 49 - 2	Selenium and compounds, as Se	Ι	0.71	0.48	0.0084	3.1
7782 - 50 - 5	Chlorine	II	7.5	5.0	0.089	33
7782 - 65 - 2	Germanium tetrahydride	II	4.4	2.1	0.052	19
7783 - 06 - 4	Hydrogen sulfide	Ι	50	2.0	0.59	33
7783 - 07 - 5	Hydrogen selenide, as Se	Ι	0.57	0.38	0.0068	2.5
7783 - 41 - 7	Oxygen difluoride	Ι	0.39	0.26	0.0046	1.7
7783 - 54 - 2	Nitrogen trifluoride	II	146	97	1.7	633
7783 - 60 - 0	Sulfur tetrafluoride	Ι	1.8	1.0	0.021	7.8
7783 - 79 - 1	Selenium hexafluoride, as Se	Ι	0.57	0.38	0.0068	2.5
7783 - 80 - 4	Tellurium hexafluoride, as Te	Ι	0.36	0.24	0.0043	1.6
7784 - 42 - 1	Arsine	Ι	0.057	0.050	0.00068	0.25

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7786 - 34 - 7	Mevinphos, inhalable fraction and vapor	Ι	0.33	0.22	0.0039	1.4
7786 - 81 - 4	Nickel sulfate (as nickel, soluble compounds), inhalable fraction	Ι	0.36	0.24	0.0043	1.6
7789 – 06 – 2	Strontium chromate, as Cr	Ι	0.0018	0.0012	0.000021	0.0078
7789 - 30 - 2	Bromine pentafluoride	III	11	7.1	0.13	48
7790 - 91 - 2	Chlorine trifluoride	Ι	1.5	0.91	0.018	6.5
7803 - 51 - 2	Phosphine	Ι	1.5	0.30	0.018	4.9
7803 - 52 - 3	Antimony hydride	Ι	1.8	1.2	0.021	7.8
8001 - 35 - 2	Chlorinated camphene	Ι	1.8	1.2	0.021	7.8
8002 - 05 - 9	Petroleum Distillate	Ι	10000	4762	119	43365
8003 - 34 - 7	Pyrethrum	Ι	18	12	0.21	78
8006 - 64 - 2	Turpentine	II	558	372	6.6	2420
8008 - 20 - 6	Kerosene	Π	1006	671	12	4362
8012 - 95 - 1	Mineral oil, excluding metal working fluids, pure, highly and severely refined, inhalable fraction	II	25	17	0.30	108
8022 - 00 - 2	Methyl demeton, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
8050 - 09 - 7	Rosin core solder thermal decomposition products	II	0.50	0.34	0.0059	2.2
8052 - 41 - 3	Stoddard solvent	II	2641	1761	31	11453
8052 - 42 - 4	Asphalt (Bitumen) fume, as benzene soluble aerosol, inhalable fraction	Π	25	17	0.30	108
8065 - 48 - 3	Demeton, inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
9002 - 86 - 2	Polyvinyl chloride (PVC) respirable fraction	II	5.0	3.4	0.059	22

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9006 - 04 - 6	Natural rubber latex, as inhalable allergenic proteins	Π	0.0010	0.0010	0.000012	0.0043
9014 - 01 - 1	Subtilisins as crystalline active enzyme	II	0.0010	0.0010	0.000012	0.0043
10024 - 97 - 2	Nitrous oxide	Ι	321	214	3.8	1392
10025 - 67 - 9	Sulfur monochloride	Ι	22	13	0.26	95
10025 - 87 - 3	Phosphorus oxychloride	Ι	2.3	1.5	0.027	10
10026 - 13 - 8	Phosphorus pentachloride	Ι	3.0	2.0	0.036	13
10035 - 10 - 6	Hydrogen bromide	II	37	22	0.44	160
10043 - 35 - 3	Borate compounds (boric acid) – inhalable fraction	Ι	7.1	4.8	0.084	31
10049 - 04 - 4	Chlorine dioxide	II	1.4	0.20	0.017	3.3
10102 - 43 - 9	Nitric oxide	II	156	104	1.9	676
10210 - 68 - 1	Cobalt carbonyl, as Co	II	0.50	0.34	0.0059	2.2
10294 - 33 - 4	Boron tribromide	III	120	71	1.4	518
10294-34-5	Boron trichloride	III	56	33	0.66	243
10421-48-4	Ferric nitrate (Iron salts, soluble, as Fe)	III	21	9.9	0.25	90
10588 - 01 - 9	Sodium dichromate (as Chromium)	Ι	0.18	0.12	0.0021	0.78
11097 - 69 - 1	Chlorodiphenyl (54% chlorine)	Ι	1.8	1.2	0.021	7.8
11103 - 86 - 9	Zinc chromates, as Cr	Ι	0.036	0.024	0.00043	0.16
12001 - 26 - 2	Mica, respirable fraction	II	15	10	0.18	65
12035 - 72 - 2	Nickel subsulfide (as Ni), inhalable fraction	Ι	0.36	0.24	0.0043	1.6
12070-12-1	Hard metal containing cobalt and tungsten carbide, as Co thoracic particulate matter	Ι	0.018	0.012	0.00021	0.077

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual <i>De Minimis</i> (lbs/yr)
12079 - 65 - 1	Manganese cyclopentadienyl tricarbonyl, as Mn	Ι	0.36	0.24	0.0043	1.6
12108 - 13 - 3	2-Methylcyclopentadienyl manganese tricarbonyl, as Mn	Ι	0.71	0.48	0.0084	3.1
12179-04-3	Borate compounds, inorganic (Sodium tetraborate pentahydrate), inhalable fraction	Ι	7.1	4.8	0.084	31
12185 - 10 - 3	Phosphorus (yellow)	Ι	0.36	0.24	0.0043	1.6
12656 - 85 - 8	Molybdate Orange (as molybdenum, soluble), respirable fraction	Ι	18	12	0.21	78
13071 - 79 - 9	Terbufos, inhalable fraction and vapor	Ι	0.036	0.024	0.00043	0.16
13121 - 70 - 5	Cyhexatin	Ι	18	12	0.21	78
13149 - 00 - 3	Hexahydrophthalic anhydride, cis- isomers, inhalable fraction and vapor	II	0.0025	0.0017	0.000030	0.011
13463 - 39 - 3	Nickel carbonyl, as Ni	Ι	1.2	0.83	0.015	5.4
13463 - 40 - 6	Iron pentacarbonyl, as Fe	Ι	1.2	0.55	0.014	5.2
13463 - 67 - 7	Titanium dioxide	II	50	34	0.59	217
13466 - 78 - 9	3-Carene	II	558	372	6.6	2420
13494 - 80 - 9	Tellurium, and compounds, as Te, excluding hydrogen telluride	Ι	0.36	0.24	0.0043	1.6
13530 - 65 - 9	Zinc chromate, as Cr	Ι	0.036	0.024	0.00043	0.16
13765 – 19 – 0	Calcium chromate, as Cr	Ι	0.0036	0.0024	0.000043	0.016
13770 - 89 - 3	Nickel (II) sulfamate (as Nickel, soluble)	Ι	0.36	0.24	0.0043	1.6
13838 - 16 - 9	Enflurane	Ι	2021	1348	24	8764
14166 - 21 - 3	Hexahydrophthalic anhydride, trans-isomer, inhalable fraction and vapor	II	0.0025	0.0017	0.000030	0.011

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis</i> <sup>C</sup> (lbs/day)	Annual <i>De Minimis</i> (lbs/yr)
14464 - 46 - 1	Silica, Crystalline- Cristobalite – respirable fraction	Ι	0.089	0.060	0.0011	0.39
14484 - 64 - 1	Ferbam, inhalable fraction	Ι	18	12	0.21	78
14807 - 96 - 6	Talc (containing asbestos fibers)	Ι	0.71	0.48	0.0084	3.1
14807 - 96 - 6	Talc containing no asbestos fibers, respirable fraction	II	10	6.7	0.12	43
14808 - 60 - 7	Silica, Crystalline-α-quartz – respirable fraction	Ι	0.089	0.060	0.0011	0.39
14857 - 34 - 2	Dimethylethoxysilane	II	11	7.0	0.13	48
14977 - 61 - 8	Chromyl chloride	II	0.81	0.54	0.0096	3.5
15972 - 60 - 8	Alachlor, inhalable fraction and vapor	Ι	3.6	2.4	0.042	15
16219 - 75 - 3	Ethylidene norbornene	Ι	35	23	0.42	152
16752 - 77 - 5	Methomyl, inhalable fraction and vapor	Ι	0.71	0.48	0.0085	3.1
16842 - 03 - 8	Cobalt hydrocarbonyl, as Co	II	0.50	0.34	0.0059	2.2
17702 - 41 - 9	Decaborane	Ι	0.89	0.60	0.011	3.9
17804 - 35 - 2	Benomyl, inhalable fraction	Ι	3.6	2.4	0.043	16
19287 – 45 – 7	Diborane	Ι	0.39	0.26	0.0046	1.7
19624 - 22 - 7	Pentaborane	Ι	0.046	0.031	0.00055	0.20
20816 - 12 - 0	Osmium tetroxide, as Os	II	0.011	0.0054	0.00013	0.048
21087 - 64 -9	Metribuzin	Ι	18	12	0.21	78
22224 - 92 - 6	Fenamiphos – inhalable fraction and vapor	Ι	0.18	0.12	0.0021	0.78
25013 - 15 - 4	Vinyl toluene	II	1217	812	14	5277
25321 - 14 - 6	Dinitrotoluene	Ι	0.71	0.48	0.0084	3.1
25154 - 54 - 5	Dinitrobenzene, mixed isomers	II	5.0	3.4	0.060	22

CAS Number	Description	Toxicity Class <sup>A</sup>	24-Hr AAL (µg/m <sup>3</sup> )	Annual AAL <sup>B</sup> (µg/m <sup>3</sup> )	24-Hr <i>De Minimis<sup>C</sup></i> (lbs/day)	Annual <i>De Minimis</i> (lbs/yr)
25167-67-3	Butene, all isomers	II	2886	1924	34	12515
25322 - 68 - 3	Polyethylene glycol	III	208	99	2.5	902
25551 - 13 - 7	Trimethyl benzene (mixed isomers)	II	619	412	7.4	2684
26140 - 60 - 3	Terphenyls (o-, m- & p- isomers)	II	25	17	0.30	108
26471 - 62 - 5	2,4- and 2,6-Toluene diisocyanate (as a mixture), inhalable fraction and vapor	Ι	0.025	0.070	0.00030	0.11
26628 - 22 - 8	Sodium azide	Ι	1.0	0.69	0.012	4.3
26628 - 22 - 8	Sodium azide, as Hydrazoic acid vapor	Ι	0.39	0.26	0.0046	1.7
26952 - 21 - 6	Isooctyl alcohol	III	5542	2639	66	24033
31242 - 93 - 0	o-Chlorinated diphenyl oxide	III	7.4	5.0	0.088	32
34590 - 94 - 8	2 (2-Methoxymethylethoxy) propanol	II	3048	2032	36	13218
35400 - 43 - 2	Sulprofos, inhalable fraction and vapor	Ι	0.36	0.24	0.0042	1.5
37300 - 23 - 5	Zinc chromates, as Cr	Ι	0.036	0.024	0.00043	0.16
53469 - 21 - 9	Chlorodiphenyl (42% chlorine)	Ι	3.6	2.4	0.043	16
55566 - 30 - 8	Tetrakis (hydroxymethyl) phosphonium sulfate	Ι	7.1	4.8	0.084	31
59355-75-8	Methyl acetylene-propadiene mixture	II	8249	5500	98	35771
61788 - 32 - 7	Hydrogenated terphenyls (nonirradiated)	III	73	49	0.87	317
64742 - 81 - 0	Kerosene	II	1006	671	12	4362
65996 - 93 - 2	Coal tar pitch volatiles, as benzene soluble aerosol	Ι	0.71	0.48	0.0084	3.1
74222 - 97 - 2	Sulfometuron methyl	II	25	17	0.30	108
86290 - 81 - 5	Gasoline	II	4477	2985	53	19414

#### **Footnotes:**

<sup>A</sup> Toxicity Classification as classified in Env-A 1406, in general:

- Toxicity Class I: Classification established pursuant to Env-A 1406.02.
- Toxicity Class II: Classification established pursuant to Env-A 1406.03.
- Toxicity Class III: Classification established pursuant to Env-A 1406.04.
- <sup>B</sup> Ambient air limit.

<sup>C</sup> *De minimis* values were calculated using non-rounded AALs. The AALs and *de minimis* values represented in this table are rounded to whole numbers or 2 significant figures if less than 10.

<sup>E</sup> Denotes regulated toxic air pollutants which have data limitations preventing derivation of AALs in accordance with Env-A 1411.

Rule	Specific State or Federal Statute the Rule Implements
Env-A 1401	RSA 125-I:1; RSA 125-I:2; RSA 125-I:3, I & II
Env-A 1402.01(a) & (b)	RSA 125-I:3, III(a)
Env-A 1402.01(c) & (d)	RSA 125-I:3, III(b)
Env-A 1402.02	RSA 125-I:3, III(c)
Env-A 1402.03	RSA 125-I:3, III(c)
Env-A 1403.01 & 1403.02	RSA 125-I:3, I; RSA 125-I:5, I & V
Env-A 1403.03	RSA 125-I:1; RSA 125-I:2; RSA 125-I:3, I & II
Env-A 1404	RSA 125-I:5, I & IV
Env-A 1405	RSA 125-I:5, V
Env-A 1405.07	RSA 125-I;5,V & RSA 125-I:2, VI
Env-A 1406	RSA 125-I:2, XIV; RSA 125-I:4
Env-A 1407 - 1411	RSA 125-I:4
Env-A 1412	RSA 125-I:4, V
Env-A 1413	RSA 125-I:1; RSA 125-I:5
Env-A 1450	RSA 125-I:4

### APPENDIX A: STATE STATUTES, FEDERAL REGULATIONS IMPLEMENTED

### **APPENDIX B: STATE STATUTORY DEFINITIONS**

# RSA 125-C:2

III-a. "Biomass" means organic matter used as a fuel, not including wood derived from construction and demolition debris, as defined in RSA 149-M:4, IV-a; wood which has been chemically treated; or agricultural crops or aquatic plants or byproducts from such crops or plants, which have been used to rehabilitate a contaminated or brownfields site through a process known as "phytoremediation."

## <u>RSA 125-I:2</u>

VI. "Compliance boundary" means the boundary of the property on which the stationary source is located or an alternate compliance boundary determined by the department in accordance with rules adopted pursuant to this chapter.