NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

NEW JERSEY ADMINISTRATIVE CODE

TITLE 7

CHAPTER 27

SUBCHAPTER 17

**Control and Prohibition of Air Pollution by Toxic Substances and Hazardous Air Pollutants**

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*Please note: The Department has made every effort to ensure that this text is identical to the official, legally effective version of this rule, set forth in the New Jersey Register. However, should there be any discrepancies between this text and the official version of the rule, the official version will prevail.*

### REGULATORY HISTORY

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# 7:27‑17.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

**“Air contaminant”** means any substance, other than water or distillates of air, present in the atmosphere as solid particles, liquid particles, vapors or gases.

**“Asbestos”** means actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite.

**“CFR”** means the Code of Federal Regulations.

**“Control apparatus”** means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

**“Department”** means the New Jersey Department of Environmental Protection.

**“Distillates of air”** means helium (He), nitrogen (N2), oxygen (O2), neon (Ne), argon (Ar), krypton (Kr), and xenon (Xe).

**“Equipment”** means any device capable of causing the emission of an air contaminant either directly or indirectly to the outdoor atmosphere, and any stack or chimney, conduit, flue, duct, vent or similar device connected or attached to, or serving the equipment. This term includes, but is not limited to, a device in which the preponderance of the air contaminants emitted is caused by a manufacturing process.

**“Fumigant”** means a pesticide registered with the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) that is a vapor or gas, or forms a vapor or gas upon application, and whose pesticidal action is through the vapor or gaseous state.

**“Gasoline”** means any petroleum distillate or petroleum distillate/oxygenate blend having a Reid vapor pressure of four pounds per square inch (207 millimeters of mercury) absolute or greater, and commonly or commercially known or sold as gasoline.

**“Hazardous air pollutant”** or **“HAP”** means an air contaminant listed in or pursuant to 42 U.S.C. § 7412(b).

**“Indirect emissions”** means a discharge of any air contaminant into the outdoor atmosphere through any opening that is not a stack or chimney directly connected to the equipment.

**“Liquid particles”** means particles which have volume but are not of rigid shape.

**“Manufacturing process”** means any action, operation or treatment embracing chemical, industrial, manufacturing, or processing factors, methods or forms including, but not limited to, furnaces, kettles, ovens, converters, cupolas, kilns, crucibles, stills, dryers, roasters, crushers, grinders, mixers, reactors, regenerators, separators, filters, reboilers, columns, classifiers, screens, quenchers, cookers, digesters, towers, washers, scrubbers, mills, condensers or absorbers.

**“New Jersey Hazardous Air Pollutant”** or **“NJHAP”** means a substance listed at N.J.A.C. 7:27-17.3, Table 2.

**“Open top tank”** means any vessel in which a manufacturing process, or any part thereof, takes place during which there is an opening to the atmosphere greater than 25 percent of the surface area of any liquid substance contained therein.

**“Person”** means any individual or entity and shall include, without limitation, corporations, companies, associations, societies, firms, partnerships, and joint stock companies, and shall also include, without limitation, all political subdivisions of this State or any agencies or instrumentalities thereof.

**“Plume rise”** means the vertical distance from the point at which an effluent stream is discharged into the outdoor atmosphere to the highest point attained by the center line of the effluent stream.

**“Reid vapor pressure”** or **“RVP”** means the absolute vapor pressure of a petroleum product in pounds per square inch (kilopascals) at 100 degrees Fahrenheit ([degrees]F) (37.8 degrees Celsius ([degrees]C)) as measured by "Method 1--Dry RVP Measured Method" or "Method 2--Herzog Semi-Automatic Method" promulgated at 40 CFR 80, Appendix E; or any other equivalent test method approved in advance in writing by the Department and the EPA.

**“Solid particles”** means particles of rigid shape and definite volume.

**“Source operation”** means any process or any identifiable part thereof that emits or can reasonably be anticipated to emit any air contaminant either directly or indirectly into the outdoor atmosphere.

 **“Standard conditions”** means 70 degrees Fahrenheit (F) (21.1 degrees Celsius (C)) and one atmosphere pressure (14.7 pounds per square inch absolute or 760.0 millimeters of mercury).

**“Storage tank”** means any tank, reservoir, or vessel which is a container for liquids or gases, wherein:

1. No manufacturing process, or part thereof, other than filling or emptying takes place; and

2. The only treatment carried out is that necessary to prevent change from occurring in the physical condition or the chemical properties of the liquids or gases deposited into the container. Such treatment may include recirculating, agitating, maintaining the temperature of the stored liquids or gases, or replacing air in the vapor space above the stored liquids or gases with an inert gas in order to inhibit the occurrence of chemical reaction.

**“Surface cleaner”** means a device to remove unwanted foreign matter from the surfaces of materials by using VOC solvents in the liquid or vapor state.

**“Surface coating formulation”** means the material used to form a protective, functional, or decorative film including, but not limited to, any architectural coating, paint, varnish, ink or adhesive applied to or impregnated into a substrate.

**“Surface coating operation”** means the application of one or more surface coating formulations, using one or more coating applicators, together with any associated drying or curing areas. A single surface coating operation ends after drying or curing and before other surface coating formulations are applied. For any web coating line, this term means an entire coating application system, including any associated drying ovens or areas between the supply roll and take-up roll, that is used to apply surface coating formulations onto a continuous strip or web.

**“Tank”** means any container whose walls are constructed of material which is rigid and self-supporting.

**“Toxic substance”** or **“TXS”** means a substance listed in N.J.A.C. 7:27-17.3, Table 1.

**“Transfer operation”** means the moving of any substance from any storage tank, manufacturing process vessel, or delivery vessel into any receiving vessel.

**“Vapor”** means the gaseous form of substances which, under standard conditions, are in the solid or liquid state and which can be changed to these states by either increasing the pressure or decreasing the temperature.

**“Vapor pressure”** means the pressure of the vapor phase of a substance, or the sum of the partial pressures of the vapor phases of individual substances in a mixture of substances, when in equilibrium with the non-vapor phase of the substance or substances.

**“Volatile organic compound”** or **“VOC”** means a volatile organic compound as that term is defined by the EPA at 40 CFR 51.100(s), as supplemented or amended, which is incorporated by reference herein.

# 7:27-17.2 Asbestos surface coating

No person shall cause, suffer, allow or permit surface coating by spraying on any building, structure, facility, installation or internal or external portion thereof, asbestos or friable material containing in excess of 0.25 per cent by weight of asbestos.

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# 7:27‑17.3 Storage, transfer, and use of toxic substances

(a) No person shall cause, suffer, allow or permit any Group I or II TXS to be emitted into the outdoor atmosphere from any source operation, unless such equipment and operation is registered with the Department no later than six months after the effective date of the inclusion of the TXS in this subchapter. Such registration shall include information relating to vessel sizes, transfer rates, emission rates, operating procedures and other information required by the Department and shall be made on forms provided by the Department.

(b) In cases where the Department determines that the equipment or operating procedures as described in the registration do not represent advances in the art of control for the types and kinds of TXS emitted, the Department will so notify the registrant.

(c) Within three months of such notification, the registrant must advise the Department of measures to be taken for reducing the TXS emissions to a rate or concentration equivalent to advances in the art of control and the schedule for completing such measures.

(d) Upon notification by the Department that the measures and schedule submitted pursuant to subsection (c) of this section are acceptable, the registrant shall implement such measures in accordance with the schedule.

(e) If, in the opinion of the Department, the measures or schedule submitted pursuant to subsection (c) of this section are not acceptable, the Department shall state its reasons and may order the registrant to resubmit, within the time specified in the order, measures to be taken and the schedule for same. If the registrant fails within the time specified to make an acceptable resubmittal, the Department may order the registrant to implement such measures as it deems appropriate within a specified time.

(f) Permit applications submitted to the Department pursuant to N.J.A.C. 7:27-8 or 22 or under N.J.A.C. 7:1K-1.5 satisfy the registration requirements of this section.

TABLE 1
TOXIC SUBSTANCES

GROUP I

|  |  |
| --- | --- |
| Name | CAS Number |
| Benzene (Benzol) | 71-43-2 |
| Carbon tetrachloride (Tetrachloromethane) | 56-23-5 |
| Chloroform (Trichloromethane) | 67-66-3 |
| Dioxane (1,4-Diethylene dioxide; 1,4-Dioxane) | 123-91-1 |
| Ethylenimine (Aziridine) | 151-56-4 |
| Ethylene dibromide (1,2-Dibromoethane) | 106-93-4 |
| Ethylene dichloride (1,2-Dichloroethane) | 107-06-2 |
| 1,1,2,2-Tetrachloroethane (sym Tetrachloroethane) | 79-34-5 |
| Tetrachloroethylene (Perchloroethylene) | 127-18-4 |
| 1,1,2-Trichloroethane (Vinyl trichloride) | 79-00-5 |
| Trichloroethylene (Trichloroethene) | 79-01-6 |

GROUP II

|  |  |
| --- | --- |
| **Name** | **CAS Number** |
| Methylene chloride (Dichloromethane) | 75-09-2 |
| 1,1,1-Trichloroethane (Methyl chloroform) | 71-55-6 |

GROUP III

|  |  |
| --- | --- |
| **Name****Fumigants:** | **CAS Number** |
| Methyl bromide | 74839 |
| Sulfuryl fluoride | 2699798 |
| Phosphine | 7803512 |

TABLE 2

NEW JERSEY HAZARDOUS AIR POLLUTANTS (NJHAPs)

|  |  |
| --- | --- |
| **Name** | **CAS Number** |
| Hydrogen sulfide | 7783064 |
| Sulfuryl fluoride | 2699798 |

# 7:27‑17.4 Discharge of GROUP II toxic substances

The Department has determined that GROUP II TXS should be subject to at least reasonably available control technology requirements. Accordingly, requirements for the implementation of control measures, including, but not limited to, requirements for the installation and use of control apparatus, set forth at N.J.A.C. 7:27-16 and 23, apply with full force to GROUP II TXS until the Department amends this rule in response to anticipated EPA rule-making or otherwise. For example, pursuant to this subsection and N.J.A.C. 7:27-16.4(b), certain transfers of methylene chloride may be conducted only with either a vapor control apparatus that reduces by no less than 90 percent the concentration of methylene chloride in the air-vapor mixture displaced during the transfer, a floating roof, or certain types of vapor balance systems. For another example, pursuant to this subsection and N.J.A.C. 7:27-23.3, a lacquer may not contain more than 5.7 pounds per gallon of methylene chloride, nor may it contain more than 4.7 pounds of VOC together with one pound of methylene chloride.

# 7:27-17.5 Operating instructions

(a) No person shall cause, suffer, allow or permit the use of TXS in any open top tank or surface cleaner unless such use is in conformity with written operating, inspection and maintenance instructions prepared in accordance with guidelines issued by the Department.

(b) Any person subject to the provisions of (a) above shall maintain a training program to ensure that all personnel associated with the use or operation of the open top tank or surface cleaner understand and follow the specified procedure.

(c) Copies of operating instructions and maintenance instructions must be located at the open top tank or surface cleaner. Copies shall be supplied to the Department when requested and must be accompanied by similar documents supplied by the equipment manufacturer, with explanations for differences between the two.

(d) The written procedures required by this section shall be submitted to the Department upon request within 10 days of the receipt of such request; such procedure shall be subject to review and approval by the Department. If, in the opinion of the Department, such procedure does not fulfill the requirements of this section, the Department may state its reason for disapproval and order the preparation of an amended procedure within the time period specified in the order. If the person responsible fails within the time period specified in the order to submit an amended procedure which, in the opinion of the Department, fulfills the said requirements, the Department may revise the procedure accordingly. Such revised procedure will thereafter be that to which the person responsible must conform.

(e) Any person subject to the provisions of this section shall notify the Department in writing within five days of any revision or alteration of a procedure approved pursuant to the provisions of (d) above. Such written notification shall include a detailed description of the changes in the procedure and the reasons therefor. Such amended procedure shall be subject to review and approval by the Department.

# 7:27-17.6 Emission information and tests

(a) Any person responsible for the manufacture, application or use of any coating, applied on or after August 15, 1977, which the Department, or any agent thereof, has reason to believe contains asbestos shall, when requested by the Department, conduct such tests as are necessary in the opinion of the Department to determine the presence and the amount and/or kinds of asbestos in the coating. Such tests shall be conducted in a manner approved by the Department and shall be made at the expense of the person responsible.

(b) The Department may waive the testing requirements of subsection (a) of this section upon receipt of a materials specification report from the material manufacturer certifying that the asbestos content of the surface coating for which testing is required complies with the provisions of section 2 of this subchapter.

(c) Any person responsible for the emission of TXS shall, upon request of the Department, provide:

1. Information relating to the location, rate, duration, composition, and properties of the effluent and such other information as the Department may prescribe.

2. Facilities and necessary equipment for determining the quantity and identity of TXS emitted into the outdoor atmosphere and shall conduct such tests using methods approved by the Department. Test data shall be recorded in a permanent log at such time intervals as specified by the Department and shall be maintained for a period of not less than two years and shall be available for review by the Department.

3. Sampling facilities and testing facilities exclusive of instrumentation and sensing devices as may be necessary for the Department to determine the nature and quantity of TXS being emitted into the outdoor atmosphere. During such testing by the Department, the equipment and all components connected, or attached to, or serving the equipment shall be used and operated under normal routine operating conditions or under such other conditions as may be requested by the Department. The facilities may be either permanent or temporary, at the discretion of the person responsible for their provision, and shall conform to all applicable laws and regulations concerning safe construction and safe practice.

# 7:27-17.7 Applicability

(a) This subchapter addressesasbestos coating, HAPs, TXS, and NJHAPs.  It also addresses the manufacture, application, or use of any coating containing asbestos, as well as the emission of HAPs, TXS, or NJHAPs from any source operation.

(b) Wheneverthe provisions of this subchapter or any other subchapters of this chapter apply to any persons, equipment, control apparatus, or the emissions of HAPs, TXS, or NJHAPs, the requirements of the relevant provisions of this subchapter and all subchapters of this chapter will apply.

(c) Whenever a HAP, TXS, or NJHAP subject to the provisions of this subchapter is also subject to the provisions of any other subchapters of this chapter, the relevant provisions of the subchapter requiring the lowest allowable rate will apply.

# 7:27-17.8 Exceptions

(a) The provisions of N.J.A.C. 7:27-17.3 and 17.6(c) do not apply to the benzene constituent of gasoline that is discharged to the atmosphere from storage tanks or transfer operations.

(b) N.J.A.C. 7:27-17.3, 17.5, 17.6(c), and 17.7do not apply to any TXS that:

1. Was not added to or deliberately formed in a raw material or a finished product; and

2. Does not exceed 0.25 percent by weight of any raw material or finished product; and

3. Is not emitted from any source operation, storage tank, or transfer operation at a rate in excess of 0.1 pounds (45.4 grams) per hour.

# 7:27-17.9 Reporting and state-of-the-art thresholds for hazardous air pollutants, toxic substances, and New Jersey Hazardous Air Pollutants

(a) The reporting thresholds for HAPs, TXS, and NJHAPs, referenced at N.J.A.C. 7:27-8, 21, and 22, and the state-of-the-art thresholds for HAPs, TXS, and NJHAPs, referenced at N.J.A.C. 7:27-8 and 22, are as listed in Tables 3A and 3B below.

(b) There are two distinct and independent reporting thresholds for air contaminants listed in Table 3B (annual and hourly). The provisions at N.J.A.C. 7:27-8, 21, and 22 referenced at (a) above apply if the potential to emit the listed air contaminant satisfies the provision’s threshold requirement, using either the annual or hourly threshold.

TABLE 3A

Reporting and SOTA Thresholds (HAPs and NJHAPs that are not TXS)6

(Potential to emit)

|  |  |  |  |
| --- | --- | --- | --- |
| CAS Number | Air Contaminant | Reporting Threshold (lbs/yr) | SOTA Threshold (lbs/yr) |
|   |   |  |   |
| 75070 | Acetaldehyde | 21 | 10,000 |
|   |   |  |   |
| 60355 | Acetamide | 2 | 2,000 |
|   |   |  |   |
| 75058 | Acetonitrile | 2,000 | 8,000 |
|  |   |  |  |
| 98862 | Acetophenone | 1 | 2,000 |
|   |   |  |   |
| 53963 | 2‑Acetylaminofluorene | 0.04 | 10 |
|   |   |   |   |
| 107028 | Acrolein | 1 | 80 |
|   |   |   |   |
| 79061 | Acrylamide | 0.5 | 40 |
|   |   |   |   |
| 79107 | Acrylic acid | 45 | 1,200 |
|   |   |   |   |
| 107131 | Acrylonitrile | 1 | 600 |
|   |   |   |   |
| 107051 | Allyl chloride | 8 | 2,000 |
|   |   |   |   |
| 92671 | 4‑Aminobiphenyl | 0.01 | 2,000 |
|   |   |  |   |
| 62533 | Aniline | 28 | 2,000 |
|   |   |  |   |
| 90040 | o‑Anisidine | 1 | 2,000 |
|  |   |  |   |
| 92875 | Benzidine | 0.001 | 0.6 |
|   |   |  |  |
| 98077 | Benzotrichloride | 0.01 | 12 |
|   |   |  |  |
| 100447 | Benzyl chloride | 1 | 200 |
|   |   |  |  |
| 92524 | Biphenyl | 18 | 10,000 |
|   |   |  |  |
| 117817 | Bis(2‑ethylhexyl)phthalate | 18 | 10,000 |
|   |   |  |  |
| 542881 | Bis(chloromethyl)ether | 0.001 | 0.6 |
|   |   |  |  |
| 75252 | Bromoform | 42 | 10,000 |
|   |   |  |   |
| 106945 | 1-Bromopropane | 2,0003 | 10,0003 |
|  |  |  |  |
| 106990 | 1,3‑Butadiene | 1.5 | 140 |
|   |   |   |   |
| 156627 | Calcium cyanamide | 2,000 | 10,000 |
|   |   |  |  |
| 133062 | Captan | 70 | 10,000 |
|   |   |   |   |
| 63252 | Carbaryl | 2,000 | 10,000 |
|   |   |  |  |
| 75150 | Carbon disulfide | 2,000 | 2,000 |
|   |   |  |  |
| 463581 | Carbonyl sulfide | 1,000 | 10,000 |
|   |   |  |  |
| 120809 | Catechol | 1,000 | 10,000 |
|   |   |  |  |
| 133904 | Chloramben | 200 | 10,000 |
|   |   |  |  |
| 57749 | Chlordane | 0.5 | 20 |
|   |   |  |  |
| 7782505 | Chlorine | 9 | 200 |
|   |   |  |  |
| 79118 | Chloroacetic acid | 20 | 200 |
|   |   |  |  |
| 532274 | 2‑Chloroacetophenone | 1.5 | 120 |
|   |   |  |  |
| 108907 | Chlorobenzene | 2,000 | 10,000 |
|   |   |  |  |
| 510156 | Chlorobenzilate | 1.5 | 800 |
|   |   |  |  |
| 107302 | Chloromethyl methyl ether | 0.07 | 200 |
|   |   |  |  |
| 126998 | Chloroprene | 0.15 | 2,000 |
|   |   |  |  |
| 1319773 | Cresols/Cresylic acid | 2,000 | 2,000 |
|   |   |  |  |
| 95487 | o‑Cresol | 2,000 | 2,000 |
|   |   |  |   |
| 108394 | m‑Cresol | 2,000 | 2,000 |
|   |   |  |  |
| 106445 | p‑Cresol | 2,000 | 2,000 |
|   |   |  |  |
| 98828 | Cumene | 2,000 | 10,000 |
|   |   |  |  |
| 94757 | 2,4‑D, salts and esters | 2,000 | 10,000 |
|   |   |  |  |
| 547044 | DDE | 0.5 | 20 |
|   |   |  |  |
| 334883 | Diazomethane | 200 | 2,000 |
|   |   |  |  |
| 132649 | Dibenzofurans | 1,000 | 10,000 |
|   |   |  |  |
| 96128 | 1,2‑Dibromo‑3‑chloropropane | 0.02 | 200 |
|   |   |  |  |
| 84742 | Dibutylphthalate | 2,000 | 10,000 |
|   |   |  |  |
| 106467 | 1,4‑Dichlorobenzene | 4 | 6,000 |
|   |   |  |  |
| 91941 | 3,3‑Dichlorobenzidine | 0.14 | 400 |
|   |   |  |   |
| 111444 | Dichloroethyl ether | 0.14 | 120 |
|   |   |  |  |
| 542756 | 1,3‑Dichloropropene | 11.5 | 2,000 |
|   |   |  |  |
| 62737 | Dichlorvos | 0.5 | 400 |
|   |   |  |  |
| 111422 | Diethanolamine | 140 | 10,000 |
|   |   |  |  |
| 121697 | N,N‑ Dimethylaniline | 200 | 2,000 |
|   |   |  |  |
| 64675 | Diethyl sulfate | 200 | 2,000 |
|   |   |  |  |
| 119904 | 3,3‑Dimethoxybenzidine | 20 | 200 |
|   |   |  |  |
| 60117 | 4-Dimethyl aminoazobenzene | 0.04 | 2,000 |
|   |   |  |  |
| 119937 | 3,3‑Dimethyl benzidine | 2 | 16 |
|   |   |  |  |
| 79447 | Dimethyl carbamyl chloride | 0.01 | 40 |
|   |   |  |  |
| 68122 | Dimethyl formamide | 1,300 | 2,000 |
|   |   |  |  |
| 57147 | 1,1‑Dimethyl hydrazine | 0.1 | 16 |
|   |   |  |   |
| 131113 | Dimethyl phthalate | 2,000 | 10,000 |
|   |   |  |  |
| 77781 | Dimethyl sulfate | 0.01 | 200 |
|   |   |  |   |
| 534521 | 4,6‑Dinitro‑o‑cresol | 20 | 200 |
|   |   |  |  |
| 51285 | 2,4‑Dinitrophenol | 200 | 2,000 |
|   |   |  |  |
| 121142 | 2,4‑Dinitrotoluene | 0.5 | 40 |
|   |   |   |  |
| 122667 | 1,2‑Diphenylhydrazine | 0.2 | 180 |
|   |   |   |   |
| 106898 | Epichlorohydrin | 39 | 4,000 |
|   |   |   |   |
| 106887 | 1,2‑Epoxybutane | 900 | 2,000 |
|   |   |   |   |
| 140885 | Ethyl acrylate | 370 | 2,000 |
|   |   |   |   |
| 100414 | Ethyl benzene | 19 | 10,000 |
|   |   |  |   |
| 51796 | Ethyl carbamate | 0.15 | 1,600 |
|   |   |  |   |
| 75003 | Ethyl chloride | 2,000 | 10,000 |
|   |  |  |   |
| 107211 | Ethylene glycol | 2,000 | 10,000 |
|  |  |  |  |
| 75218 | Ethylene oxide | 0.02 | 200 |
|   |   |  |   |
| 96457 | Ethylene thiourea | 3.5 | 1,200 |
|   |   |  |   |
| 75343 | Ethylidene dichloride | 30 | 2,000 |
|   |   |  |   |
| 50000 | Formaldehyde | 3.5 | 4,000 |
|   |   |  |   |
| 76448 | Heptachlor | 0.04 | 40 |
|   |   |   |   |
| 118741 | Hexachlorobenzene | 0.1 | 20 |
|   |   |  |   |
| 87683 | Hexachlorobutadiene | 2 | 1,800 |
|   |   |  |   |
| 77474 | Hexachlorocyclopentadiene | 9 | 200 |
|   |   |  |   |
| 67721 | Hexachloroethane | 4 | 10,000 |
|   |   |  |  |
| 822060 | Hexamethylene‑1,6‑diisocyante | 0.5 | 40 |
|   |   |  |  |
| 680319 | Hexamethylphosphoramide | 2 | 20 |
|   |   |   |   |
| 110543 | Hexane | 2,000 | 10,000 |
|   |   |   |   |
| 302012 | Hydrazine | 0.01 | 8 |
|   |   |  |   |
| 7647010 | Hydrochloric acid | 900 | 10,000 |
|   |   |  |   |
| 7664393 | Hydrogen fluoride | 600 | 200 |
|   |   |  |   |
| 7783064 | Hydrogen sulfide5 | 905 | 10,0005 |
|  |  |  |  |
| 123319 | Hydroquinone | 200 | 2,000 |
|   |   |  |   |
| 78591 | Isophorone | 2,000 | 10,000 |
|   |   |   |   |
| 58899 | Lindane | 0.15 | 20 |
|   |   |   |   |
| 108316 | Maleic anhydride | 32 | 2,000 |
|   |   |  |   |
| 67561 | Methanol | 2,000 | 10,000 |
|   |   |  |   |
| 72435 | Methoxychlor | 2,000 | 10,000 |
|   |   |  |   |
| 74873 | Methyl chloride | 25 | 10,000 |
|   |   |  |   |
| 60344 | Methyl hydrazine | 12 | 120 |
|   |   |   |   |
| 74884 | Methyl iodide | 200 | 2,000 |
|   |   |   |   |
| 108101 | Methyl isobutyl ketone | 2,000 | 10,000 |
|  |  |  |  |
| 624839 | Methyl isocyanate | 45 | 200 |
|   |   |  |   |
| 80626 | Methyl methacrylate | 2,000 | 10,000 |
|  |  |  |  |
| 1634044 | Methyl tert butyl ether | 180 | 10,000 |
|   |   |  |   |
| 101144 | 4,4‑Methylene bis(2‑chloraniline) | 0.1 | 400 |
|   |   |  |   |
| 101688 | 4,4-Methylene diphenyl diisocyanate | 27 | 200 |
|   |   |  |   |
| 101779 | 4,4'‑Methylene dianiline | 0.1 | 2,000 |
|   |   |  |   |
| 91203 | Naphthalene | 1.4 | 10,000 |
|   |   |  |   |
| 98953 | Nitrobenzene | 1 | 2,000 |
|   |   |  |   |
| 92933 | 4‑Nitrobiphenyl | 200 | 2,000 |
|   |   |  |   |
| 100027 | 4‑Nitrophenol | 1,000 | 10,000 |
|   |   |  |   |
| 79469 | 2‑Nitropropane | 0.02 | 2,000 |
|   |   |  |   |
| 684935 | N‑Nitroso‑N‑methylurea | 0.002 | 0.4 |
|   |   |  |   |
| 62759 | N‑Nitrosodimethylamine | 0.004 | 2 |
|   |   |  |   |
| 59892 | N‑Nitrosomorpholine | 0.02 | 2,000 |
|   |   |  |   |
| 56382 | Parathion | 20 | 200 |
|   |   |  |   |
| 82688 | Pentachloronitrobenzene | 60 | 600 |
|   |   |  |   |
| 87865 | Pentachlorophenol | 9 | 1,400 |
|   |   |  |   |
| 108952 | Phenol | 2,000 | 200 |
|   |   |  |   |
| 106503 | p‑Phenylenediamine | 2,000 | 10,000 |
|   |   |  |   |
| 75445 | Phosgene | 14 | 200 |
|   |   |  |   |
| 7723140 | Phosphorus | 3.2 | 200 |
|   |   |  |   |
| 85449 | Phthalic anhydride | 900 | 10,000 |
|   |   |  |   |
| 1336363 | Polychlorinated biphenyls | 0.5 | 18 |
|   |   |  |   |
| 1120714 | 1,3‑Propane sultone | 0.07 | 60 |
|   |   |  |   |
| 57578 | beta‑Propiolactone | 0.01 | 200 |
|   |   |   |   |
| 123386 | Propionaldehyde | 350 | 10,000 |
|   |   |  |   |
| 114261 | Propoxur | 2,000 | 10,000 |
|   |   |  |   |
| 78875 | Propylene dichloride | 4.5 | 2,000 |
|   |   |  |   |
| 75569 | Propylene oxide | 12 | 10,000 |
|   |   |  |  |
| 75558 | 1,2‑Propylenimine | 0.6 | 60 |
|   |   |  |   |
| 91225 | Quinoline | 0.05 | 120 |
|   |   |  |   |
| 106514 | Quinone | 1,000 | 10,000 |
|   |   |  |   |
| 100425 | Styrene | 80 | 2,000 |
|   |   |  |   |
| 96093 | Styrene oxide | 1 | 2,000 |
|   |   |  |   |
| 1746016 | 2,3,7,8‑TCDD | 0.0000012 | 0.0012 |
|   |   |  |   |
| 127184 | Tetrachloroethylene | 180 | 10,000 |
|   |   |  |   |
| 7550450 | Titanium tetrachloride | 4.6 | 200 |
|   |   |  |   |
| 108883 | Toluene | 2,000 | 10,000 |
|   |   |  |   |
| 95807 | 2,4‑Toluene diamine | 0.04 | 40 |
|   |   |  |   |
| 584849 | 2,4‑Toluene diiscocyanate | 3.3 | 200 |
|   |   |  |   |
| 95534 | o‑Toluidine | 0.9 | 2,000 |
|   |   |  |   |
| 8001352 | Toxaphene | 0.14 | 20 |
|   |   |  |   |
| 120821 | 1,2,4‑Trichlorobenzene | 90 | 10,000 |
|   |   |  |   |
| 95954 | 2,4,5‑Trichlorophenol | 200 | 2,000 |
|   |   |  |   |
| 88062 | 2,4,6‑Trichlorophenol | 15 | 10,000 |
|   |   |   |   |
| 121448 | Triethylamine | 325 | 10,000 |
|   |   |   |   |
| 1582098 | Trifluralin | 21 | 10,000 |
|   |   |  |   |
| 540841 | 2,2,4‑Trimethylpentane | 1,000 | 10,000 |
|   |   |  |   |
| 108054 | Vinyl acetate | 2,000 | 2,000 |
|   |   |  |   |
| 593602 | Vinyl bromide | 1.5 | 1,200 |
|   |   |  |   |
| 75014 | Vinyl chloride | 5 | 400 |
|   |   |  |   |
| 75354 | Vinylidene chloride | 2,000 | 800 |
|   |   |  |   |
| 1330207 | Xylenes | 2,000 | 10,000 |
|   |   |  |   |
| 95476 | o‑Xylenes | 2,000 | 10,000 |
|   |   |  |   |
| 108380 | m‑Xylenes | 2,000 | 10,000 |
|   |   |  |   |
| 106423 | p‑Xylenes | 2,000 | 10,000 |
|   |
| **CHEMICAL COMPOUND CLASSES** |
|   |   |  |   |
|  | Antimony compounds1 | 1,000 | 10,000 |
|  |   |  |   |
| 7783702 | Antimony pentafluoride | 20 | 200 |
|   |   |  |   |
| 8300745 | Antimony potassium tartrate | 200 | 2,000 |
|   |   |  |   |
| 1309644 | Antimony trioxide | 9 | 2,000 |
|   |   |  |   |
| 1345046 | Antimony trisulfide | 20 | 2,000 |
|   |   |  |   |
|  | Arsenic & inorganic arsenic compounds | 0.01 | 10 |
|   |   |  |   |
| 7784421 | Arsine | 0.01 | 10 |
|   |   |  |   |
|  | Beryllium compounds1 | 0.02 | 16 |
|   |   |  |   |
|  | Beryllium salts | 0.004 | 0.04 |
|   |   |  |   |
|  | Cadmium compounds | 0.01 | 20 |
|   |   |  |   |
| 130618 | Cadmium oxide | 0.01 | 20 |
|   |   |  |   |
|  | Chromium compounds1 | 1,000 | 10,000 |
|   |   |  |   |
|  | Hexavalent chromium compounds | 0.004 | 4 |
|   |   |  |   |
|  | Trivalent chromium compounds | 1,000 | 10,000 |
|   |   |  |   |
| 10025737 | Chromic chloride | 2 | 20 |
|   |   |  |   |
| 744084 | Cobalt metal and compounds1 | 0.005 | 200 |
|   |   |  |   |
| 10210681 | Cobalt carbonyl | 0.005 | 200 |
|   |   |  |   |
| 62207765 | Fluomine | 0.005 | 200 |
|   |   |   |   |
|  | Coke oven emissions | 0.07 | 60 |
|   |   |  |   |
|  | Cyanide compounds1 | 35 | 10,000 |
|   |   |  |   |
| 151508 | Potassium cyanide | 20 | 200 |
|   |   |  |   |
| 143339 | Sodium cyanide | 20 | 200 |
|   |   |  |   |
|  | Glycol ethers1 | 1,000 | 10,000 |
|   |   |  |   |
| 110805 | 2‑Ethoxy ethanol | 1,000 | 10,000 |
|   |   |  |   |
| 109864 | 2‑Methoxy ethanol | 350 | 10,000 |
|   |   |  |   |
|  | Lead and compounds1 | 2 | 20 |
|   |   |  |   |
| 78002 | Tetraethyl lead | 2 | 20 |
|   |   |  |   |
| 75741 | Tetramethyl lead | 2 | 20 |
|   |   |  |   |
| 7439965 | Manganese and compounds1 | 0.6 | 1,600 |
|   |   |  |   |
| 12108133 | Methylcyclopentadienyl manganese | 0.6 | 200 |
|   |   |  |   |
|  | Mercury compounds1 | 2 | 20 |
|   |   |  |   |
|  | Elemental mercury | 2 | 20 |
|   |   |  |   |
| 748794 | Mercuric chloride | 2 | 20 |
|   |   |  |   |
| 10045940 | Mercuric nitrate | 2 | 20 |
|   |   |  |   |
| 62384 | Phenyl mercuric acetate | 2 | 20 |
|   |   |  |   |
|  | Nickel compounds1 | 0.6 | 2,000 |
|   |   |   |   |
| 13463393 | Nickel carbonyl | 0.6 | 200 |
|   |   |   |   |
| 12035722 | Nickel refinery dust | 0.2 | 160 |
|   |   |  |   |
|  | Nickel subsulfide | 0.1 | 80 |
|   |   |  |   |
|  | Polycyclic organic matter1 | 2 | 20 |
|   |   |  |   |
| 56553 | Benz(a)anthracene | 0.4 | 20 |
|   |   |  |   |
| 225514 | Benz(c)acridine | 2 | 20 |
|   |   |  |   |
| 50328 | Benzo(a)pyrene | 0.04 | 20 |
|   |   |  |   |
| 205992 | Benzo(b)fluoranthene | 0.4 | 20 |
|   |   |  |   |
| 218019 | Chrysene | 2 | 20 |
|   |   |  |   |
| 53703 | Dibenz(a,h)anthracene | 0.04 | 20 |
|   |   |  |   |
| 189559 | 1,2:7,8‑Dibenzopyrene | 0.004 | 20 |
|   |   |  |   |
| 57976 | 7,12‑Dimethylbenz(a)anthracene | 0.0007 | 20 |
|   |   |  |   |
| 193395 | Indeno(1,2,3‑c,d)pyrene | 0.4 | 20 |
|   |  |  |   |
| 7782492 | Selenium compounds1 | 925 | 200 |
|   |   |  |   |
| 7783075 | Hydrogen selenide | 20 | 200 |
|   |   |   |   |
| 7488564 | Selenium sulfide (mono and di) | 20 | 200 |
|   |   |  |   |
| 13410010 | Sodium selenate | 20 | 200 |
|   |   |   |   |
| 10102188 | Sodium selenite | 20 | 200 |
|  |  |  |  |
|  | Total dioxin and furans2 | 0.00012 | 0.0012 |
|  |  |  |  |

1Some compounds or subgroups included in this chemical group are also individually named in this table. If a compound or subgroup is individually listed, the threshold listed for the compound or subgroup takes precedence over the threshold listed for the chemical group as a whole. If a compound or subgroup is not individually listed, the threshold for the entire chemical group applies to each compound or subgroup included in the chemical group.

2As defined in Interim Procedures for Estimating Risks Associated with Exposure to Mixtures of Chlorinated-p-Dioxins and Dibenzofurans (CDDs and CDFs), March, 1989 update, EPA-625/3-89/016, available from www.epa.gov/nscep.

3 This threshold is operative on and after June 3, 2022.

4 In the case where the SOTA threshold is lower than the reporting threshold, the SOTA threshold is applied as the reporting threshold.

5 New Jersey Hazardous Air Pollutant (NJHAP).

6 Except for those air contaminants identified by footnote 5 as NJHAPs, each of the air contaminants in this Table is a HAP, and none of the air contaminants in this table is a TXS.

TABLE 3B

Reporting and SOTA Thresholds (HAPs and NJHAPs that are TXS)3

(Potential to emit)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CAS Number | Air Contaminant | Reporting Threshold (lb/hr) | Reporting Threshold (lbs/yr) | SOTA Threshold (lbs/yr) |
|  |  |  |  |  |
| 71432 | Benzene | 0.01 | 6 | 4,000 |
|  |  |  |  |  |
| 56235 | Carbon tetrachloride | 0.01 | 8 | 2,000 |
|  |  |  |  |  |
| 67663 | Chloroform | 0.01 | 2 | 1,800 |
|  |  |  |  |  |
| 123911 | 1,4‑Dioxane | 0.01 | 9 | 10,000 |
|  |  |  |  |  |
| 106934 | Ethylene dibromide | 0.01 | 0.08 | 200 |
|  |  |  |  |  |
| 107062 | Ethylene dichloride | 0.01 | 1.8 | 1,600 |
|  |  |  |  |  |
| 151564 | Ethylene imine | 0.01 | 0.002 | 6 |
|  |  |  |  |  |
| 74839 | Methyl bromide | 0.011 | 230 | 10,000 |
|  |  |  |  |  |
| 71556 | Methyl chloroform | 0.01 | 2,000 | 10,000 |
|  |  |  |  |  |
| 75092 | Methylene chloride | 0.01 | 2,000 | 10,000 |
|  |  |  |  |  |
| 7803512 | Phosphine | 0.011 | 14 | 10,000 |
|  |  |  |  |  |
| 2699798 | Sulfuryl fluoride2 | 0.011 | 901 | 10,0001 |
|  |  |  |  |  |
| 79345 | 1,1,2,2‑Tetrachloroethane | 0.01 | 0.8 | 600 |
|  |  |  |  |  |
| 127184 | Tetrachloroethylene | 0.01 | 180 | 10,000 |
|  |  |  |  |  |
| 79005 | 1,1,2‑Trichloroethane | 0.01 | 3 | 2,000 |
|  |  |  |  |  |
| 79016 | Trichloroethylene | 0.01 | 8 | 10,000 |
|  |  |  |  |  |

1 This threshold is operative on and after June 3, 2022.

2 New Jersey Hazardous Air Pollutant (NJHAP).

3 Except for those air contaminants identified by footnote 2 as NJHAPs, each of the air contaminants in this Table is a HAP, and all of the air contaminants in this table are TXS.

# 7:27-17.10 Discharge of fumigants

(a) For a source operation that exceeds the permit applicability threshold at N.J.A.C. 7:27-8.2(c) 22, or that meets the criteria of paragraph 21 of the definition of “significant source operation” at N.J.A.C. 7:27-22.1, except as provided at N.J.A.C. 7:27-8.2(g) and 22.36, no person shall cause, suffer, allow, or permit the emission of a fumigant from any source operation into the outdoor atmosphere, unless a risk assessment for that operation has been performed and meets the criteria for issuance of a permit, as provided at N.J.A.C. 7:27-8.5 and 22.8.

(b) The risk assessment required at (a) above shall be conducted in accordance with an air quality dispersion modeling protocol and/or risk screening worksheets approved in advance by the Department. The Department will not approve an air quality dispersion modeling protocol, unless the protocol accounts for all relevant site-specific and general factors. These factors include, but are not limited to, a land use analysis, proper consideration of topography, a good engineering practice stack height analysis, use of the most recent version of the EPA-approved models, identification of the most appropriate meteorological data, and consideration of all relevant averaging times. The air quality dispersion modeling protocol shall document how the person proposes to conduct the air quality impact analysis and/or risk assessment, and how the results will be presented to the Department. Technical guidance on the preparation of an air quality dispersion modeling protocol and the use of risk screening worksheets can be found in Technical Manual 1002 (Guidance on Preparing an Air Quality Modeling Protocol) and Technical Manual 1003 (Guidance on Preparing a Risk Assessment for Air Contaminant Emissions), available on the Department's website at http://www.nj.gov/dep/aqpp/techman.html. The risk screening worksheets can be found on the Department’s website at https://www.state.nj.us/dep/aqpp/risk.html. Additional technical guidance on preparing a protocol may be requested from:

Department of Environmental Protection

Air Quality Regulation and Planning

Bureau of Evaluation and Planning

Air Quality Evaluation Section

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