The statement of scope for this rule, SS 116-20, was approved by the Governor on August 13, 2020, published in Register No. 776A4 on August 24, 2020, and approved by the Natural Resources Board on October 28, 2020. This rule was approved by the Governor on February 10, 2022.

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
REPEALING, RENUMBERING, RENUMBERING AND AMENDING, AMENDING, REPEALING AND RECREATING AND CREATING RULES

The Wisconsin Natural Resources Board adopts an order to **repeal** NR 438.04 (1) (Note), (2) (c), (e), (g), (h) and (6); to **renumber** NR 438.02 (1); to **amend** NR 438 (title), 438.01 (2), 438.03 (title), (1) (a), (am) 1., (b), Table 1, (c), (d), (2), (3), (4), (5) (title), (a), (b), (c), and (6), 438.04 (1), (2) (intro.), (b) and (f), 484.06 (4) Table 4D Row (a); to **repeal and recreate** NR 438.02 (2), 438.04 (2) (d), (3), (4), and (5); and to **create** NR 400.03 (4) (jp), 438.02 (1a), (1g), (1i), (1k), (1m), (1o), (1q), (1s), (1u), (3), and (4), 438.03 (1) (af), (am) 3. and 4., and (5) (a) (Note), relating to the incorporation of a $PM_{2.5}$ emissions reporting requirement, alignment of state and federal emissions reporting terminology, updates to reflect current emissions reporting procedure, and affecting small business.

**AM-31-19**

**Analysis Prepared by the Department of Natural Resources**

**1. Statute Interpreted:** Sections 285.11(11), 285.17, 299.15, Stats. The State Implementation Plan developed under s. 285.11(6), Stats., is revised.

**2. Statutory Authority:** Sections 285.17, 299.15, Stats.

**3. Explanation of Agency Authority:** The Department of Natural Resources (the department) is required to promulgate by rule the classification of air contaminant sources which may cause or contribute to air pollution and require by rule those discharging air contaminants to report the manner used, amount used and amount discharged for each such contaminant. The department is also required to coordinate the reporting requirements to prevent duplication of reporting requirements.

**4. Related Statutes or Rules:** Section 299.15, Stats., requires the department to promulgate rules implementing reporting requirements for sources of air contaminants in the state. The proposed rule revisions correspond to the incorporation of an acronym definition in s. NR 400.03, Wis. Adm. Code, and emissions reporting requirements contained in ch. NR 438, Wis. Adm. Code. Additional proposed revisions in s. NR 484.06 *Other government organizations* align ch. NR 484, Wis. Adm. Code, with proposed revisions in ch. NR 438, Wis. Adm. Code.

**5. Plain Language Analysis:** In 2015 the U.S. Environmental Protection Agency (EPA) finalized amendments to the Air Emissions Reporting Requirements (AERR) rule (40 CFR 51, subpart A, and 40 CFR 51.122). This rule updated requirements for state and local agencies to collect and submit emissions data to the EPA. Currently, some inconsistencies exist between Wisconsin's air emissions reporting requirements codified in ch. NR 438, Wis. Adm. Code, and the AERR rule. The department is proposing to revise ch. NR 438, Wis. Adm. Code, to meet federal requirements in the AERR rule. Updating ch. NR 438, Wis. Adm. Code, will ensure the state has a legally sufficient state implementation plan (SIP), required under Section 110(a)(2) of the federal Clean Air Act (CAA).

The department is proposing to add an emissions reporting requirement for sources that directly emit particulate matter with an aerodynamic diameter of equal to or less than 2.5 µm ($PM_{2.5}$), which ensures compliance with the AERR rule and maintains an approvable SIP. Related changes include specifying

that state reporting requirements for particulate matter apply to primary emissions, where primary emissions are directly emitted to the atmosphere, rather than particulate matter formed through atmospheric chemical reactions ('secondary' emissions). Further, primary particulate emissions are being distinguished from filterable and condensable particulate emissions, which sum to equal the primary particulate emissions. Emissions reporting requirements are included for these filterable and condensable components of primary $PM_{2.5}$ and primary particulate matter with an aerodynamic diameter of equal to or less than 10 µm ($PM_{10}$). The proposed rule also addresses a deficiency in ch. NR 438, Wis. Adm. Code, identified by EPA which requires (1) major sources in nonattainment areas, (2) sources with the potential to emit equal to or greater than 100 tons per year of criteria air pollutants or ammonia, and (3) sources with actual emissions of equal to or greater than 0.5 ton per year of lead to report annual emissions of all criteria air pollutants and ammonia regardless of emissions amount. These proposed changes will ensure ch. NR 438, Wis. Adm. Code, meets federal requirements in the AERR rule (40 CFR 51, subpart A).

Additionally, the department is proposing to make other revisions to ch. NR 438, Wis. Adm. Code, to (1) align state code language with federal emissions reporting terminology, (2) revise outdated ch. NR 438, Wis. Adm. Code, language and make corresponding updates to ch. NR 484, Wis. Adm. Code, to reflect the department's current emissions inventory process, and (3) create a list of emission units, operations or activities that a facility may exclude from the annual emission inventory. These proposed changes will clarify and modernize the emissions reporting rule language in ch. NR 438, Wis. Adm. Code. The specific proposed rule changes are described below.

Alignment of state and federal emissions reporting requirements

SECTIONS 8 and 12 require the owner or operator of a facility to report annual primary PM, primary $PM_{2.5}$, primary $PM_{10}$, filterable $PM_{2.5}$, filterable $PM_{10}$, and condensable PM emissions if the facility's emissions exceed the reporting threshold in Table 1.

SECTION 9 addresses a deficiency identified by EPA which requires applicable sources under subpart A of 40 CFR 51 to report annual emissions of all criteria air pollutants and ammonia.

Alignment of state and federal emissions reporting terminology

SECTIONS 4-7 renumber or incorporate definitions for terms related to particulate matter and emissions reporting that only apply in ch. NR 438. Although several terms defined in SECTION 5 are currently defined in ch. NR 400, the proposed SECTION 5 definitions are being incorporated to ensure consistency with the definitions in the AERR rule.

Revision to outdated state code language

SECTIONS 1-3, 10, 12-25 align emissions reporting rule language to reflect the department's current emissions inventory process, and reference the specific information requested by the department's web-based air emissions inventory reporting program.

SECTIONS 6, 12, and 25 remove cross references between ss. NR 438.02 (2) and 438.03 (5) (a) and EPA's outdated FIRE emissions factor database (s. NR 484.06 (4) (a)).

Addition of emissions reporting exemption list

SECTION 11 creates a list of emission units, operations or activities that a facility may exclude from the annual emission inventory reported to the department. Sources are not required to quantify emissions from the proposed emissions reporting exclusion list if they are units, operations, or activities that the department has determined are difficult to quantify and emit de minimis amounts of air contaminants.

**6. Summary of, and Comparison with, Existing or Proposed Federal Statutes and Regulations:** The revisions to ch. NR 438, Wis. Adm. Code, are being proposed to meet federal requirements in the AERR rule (40 CFR 51, subpart A, and 40 CFR 51.122). This federal rule requires state and local agencies to collect and submit emissions data to the EPA. This rulemaking will satisfy federal emissions reporting requirements and resolve inconsistencies between state and federal emissions inventory reporting.

**7. Summary of Comments Received on the Statement of Scope and How the Agency Took Those Comments into Account in Drafting the Proposed Rule:** A preliminary public hearing was requested by the Joint Committee for the Review of Administrative Rules on August 27, 2020 and was held on October 1, 2020. No public comments were received during the preliminary public hearing and comment period on the statement of scope of the proposed rule.

**8. Comparison with Similar Rules in Adjacent States:** The States of Illinois, Iowa, Michigan, and Minnesota have incorporated $PM_{2.5}$ emissions reporting requirements into their administrative codes.

**9. Summary of Factual Data and Analytical Methodologies Used and How Any Related Findings Support the Regulatory Approach Chosen:** In 2008, EPA promulgated the AERR rule (40 CFR part 51, subpart A) to coordinate and streamline emissions inventory reporting requirements with existing requirements of the CAA and 1990 Amendments. Under the AERR rule, states and local air pollution control agencies are required to submit emissions inventories for criteria pollutants to EPA. The EPA uses these submittals to build the national inventory of air pollutant emissions (National Emissions Inventory; NEI). A comprehensive inventory updated at regular intervals is essential to allow EPA to fulfill its mandate to monitor and plan for the attainment and maintenance of the national ambient air quality standards established for criteria pollutants.

In 2015, EPA finalized amendments to the AERR rule (40 CFR 51, subpart A, and 40 CFR 51.122). The rule's updated requirements improved consistency and clarity with other federal rules and better reflects current inventory technologies and practices. The department must ensure that state reporting requirements align with those established in federal code in order to keep Wisconsin's SIP current. Section 285.14 (1), Stats., requires SIP submittals resulting in regulatory requirements to be promulgated by rule. There are no policy alternatives available for the proposed rules because the proposed actions are required under state and federal law.

Information and materials developed by EPA in support of the AERR rule amendments can be found on EPA's website at https://www.epa.gov/air-emissions-inventories/air-emissions-reporting-requirements-aerr#additional-resources and in the regulatory docket (EPA-HQ-OAR-2004-0489) associated with the 2015 amended rule (80 FR 8787). This information is applicable also to the adoption of the amended AERR requirements into the Wisconsin Administrative Code.

**10. Analysis and Supporting Documents Used to Determine the Effect on Small Business or in Preparation of an Economic Impact Report:** The department estimates that the economic impact of implementing the revised reporting requirements in Wisconsin will be minimal ($0-$50,000). The proposed changes will not involve an emission fee increase for sources and will not require sources to install new emissions monitoring equipment or reporting systems. The proposed rule will result in a small administrative impact to sources in the form of time required to report and certify annual $PM_{2.5}$ emissions if a source's emissions exceed the reporting threshold or to report and certify all criteria air pollutant and ammonia emissions for an applicable source under subpart A of 40 CFR 51.

To minimize administrative time associated with annual emissions reporting, the department's web-based

air emissions inventory reporting program provides information (i.e., emission factors) and an emissions calculator, which the owner or operator of a facility can use to estimate emissions. The program currently includes emission factors for sources to calculate their filterable and condensable $PM_{2.5}$ emissions. Furthermore, the department expects that sources required to report $PM_{2.5}$ emissions under the proposed rule are already familiar with the emissions calculations, since many of these sources likely already report other pollutant emissions under current ch. NR 438, Wis. Adm. Code, requirements.

In addition, the department has streamlined reporting requirements by creating a proposed list of excluded units, operations and activities to reduce the emissions reporting burden on sources. The department expects the proposed changes will improve the clarity of Wisconsin's emissions reporting requirements by synchronizing the emissions reporting language between ch. NR 438, Wis. Adm. Code, the department's web-based air emissions inventory reporting program, and the federal AERR rule.

The department does not anticipate that local governments, utility rate payers, public entities, or the state's economy will be economically impacted by the implementation of the proposed rules. The proposed rules will not require additional state staff to implement or affect state revenues.

**11. Effect on Small Business (initial regulatory flexibility analysis):** The AERR rule amendments state that the updated reporting requirements "will not have a significant economic impact on a substantial number of small entities under the RFA [Regulatory Flexibility Act]. This action will not impose any new requirements on small entities. This action corrects and clarifies emissions reporting requirements and provides states with additional flexibility in how they collect and report their emissions data, thereby reducing overall collection and reporting burdens and their associated costs." (80 FR 8794).

The department expects that few, if any, small businesses will be required to report $PM_{2.5}$ emissions under the proposed rule since source applicability is determined by a five ton per year emission threshold. If applicable, the proposed rule changes would have a small administrative impact on the small businesses; there would be no economic impact. Furthermore, the department expects that if there are any small businesses required to report $PM_{2.5}$ emissions under the proposed rule that they are already familiar with the emissions calculations, since these sources likely already report other pollutant emissions under current ch. NR 438, Wis. Adm. Code, requirements. As mentioned in #10 above, the department has taken steps to minimize administrative time associated with annual emissions reporting, including providing an emissions calculator directly on the department's web-based air emissions inventory reporting program and providing a list of emission units, operations, and activities that a facility may exclude from the annual emission inventory.

**12. Agency Contact Person:** Olivia Salmon, Bureau of Air Management, Wisconsin Department of Natural Resources PO Box 7921, Madison, WI 53703; (608) 630-5264; OliviaE.Salmon@Wisconsin.gov.

**13. Place where comments are to be submitted and deadline for submission:** A public hearing was held on October 29, 2021. Written comments were accepted through November 5, 2021.

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## RULE TEXT

**SECTION 1. NR 400.03 (4) (jp) is created to read:**

**NR 400.03 (4)** (jp) "NAICS" — North American Industry Classification System

**SECTION 2. NR 438 (title) is amended to read:**

**NR 438** (title) AIR CONTAMINANT ~~EMISSION~~ EMISSIONS INVENTORY REPORTING REQUIREMENTS.

**SECTION 3. NR 438.01 (2) is amended to read:**

**NR 438.01 (2)** PURPOSE. The purpose of this chapter is to establish, pursuant to ss. 285.11, 285.13, 285.17, and 299.15 (1) and (2), Stats., requirements for submission of ~~reports~~ emissions inventories for owners or operators of air contaminant sources.

**SECTION 4. NR 438.02 (1) is renumbered (1e).**

**SECTION 5. NR 438.02 (1a), (1g), (1i), (1k), (1m), (1o), (1q), (1s), and (1u) are created to read:**

**NR 438.02 (1a)** "Condensable PM" means a material that is vapor phase at stack conditions but that condenses or reacts upon cooling and dilution in the ambient air to form solid or liquid PM immediately after discharge from the stack.

Note: Condensable PM, if present from a source, is typically in the $PM_{2.5}$ size fraction and, therefore, all of it is a component of both primary $PM_{2.5}$ and primary $PM_{10}$.

**(1g) "**Filterable PM" means particles that have an aerodynamic diameter equal to or less than 100 micrometers that are directly emitted by a source as a solid or liquid at stack or release conditions and captured on the filter of a stack test train.

**(1i)** "Filterable $PM_{2.5}$" means particles that have an aerodynamic diameter equal to or less than 2.5 micrometers that are directly emitted by a source as a solid or liquid at stack or release conditions and captured on the filter of a stack test train.

**(1k)** "Filterable $PM_{10}$" means particles that have an aerodynamic diameter equal to or less than 10 micrometers that are directly emitted by a source as a solid or liquid at stack or release conditions and captured on the filter of a stack test train.

**(1m)** "Primary PM" means the sum of filterable PM and condensable PM.

**(1o)** "Primary $PM_{2.5}$" means the sum of filterable $PM_{2.5}$ and condensable PM.

**(1q)** "Primary $PM_{10}$" means the sum of filterable $PM_{10}$ and condensable PM.

**(1s)** "Process" means an activity occurring at a unit device that generates emissions, controls emissions, or discharges emissions.

Note: Examples of processes include combustion, coating, controlling, crushing, or discharging.

**(1u)** "Process type code" means a brief descriptor of the process type.

**SECTION 6. NR 438.02 (2) is repealed and recreated to read:**

**NR 438.02 (2)** "Source classification code" means a process-level code that describes the equipment or operation that is emitting a pollutant.

Note: Source classification codes are available as set forth by EPA's Emissions Inventory System, which is an information system for storing all current and historical emissions inventory data.

**SECTION 7. NR 438.02 (3), and (4) are created to read:**

**NR 438.02 (3)** "Unit device" means the physical equipment or equipment line where a process occurs.

Note: Examples of unit devices include boilers, coating lines, baghouses, and stacks.

**(4)** "Unit device type code" means a brief descriptor of the unit device type.

**SECTION 8. NR 438.03 (title) and (1) (a) are amended to read:**

**NR 438.03 Required ~~emission inventory reports~~ emissions inventories. (1)** REPORTABLE AIR CONTAMINANTS AND LEVELS. (a) Except as provided ~~in~~under par. (am), any person owning or operating a facility that emits an air contaminant in quantities above applicable reporting levels, except indirect sources of air pollution, shall annually submit to the department an ~~emission~~ emissions inventory ~~report~~ of annual, actual emissions or, for primary particulate matter, primary $PM_{10}$, primary $PM_{2.5}$, sulfur dioxide, nitrogen oxides, carbon monoxide and volatile organic compounds, throughput information sufficient for the department to calculate its annual, actual emissions. The reportable air contaminants and applicable reporting levels are listed in Table 1 in this chapter.

**SECTION 9. NR 438.03 (1) (af) is created to read:**

**NR 438.03 (1)** (af) The owner or operator of a facility shall annually submit to the department an emissions inventory for sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds, primary $PM_{10}$, primary $PM_{2.5}$, ammonia, and lead and lead compounds, if the facility meets any of the following:

1. The facility is a Part 70 major source, as defined under 40 CFR 70.2.

2. The facility is a nonattainment area major source, as defined in s. NR 408.02 (21).

3. The facility has the potential to emit equal to or greater than 100 tons per year of ammonia.

4. The facility has actual emissions equal to or greater than 0.5 ton per year of lead.

**SECTION 10. NR 438.03 (1) (am) 1. is amended to read:**

(am) 1. The owner or operator of a facility described by ~~a standard industrial classification~~ an SIC code listed in Table D of s. NR 445.11, or that has annual actual emissions of less than 5 tons of particulate matter and less than 3 tons of volatile organic compounds, may limit the information on hazardous air contaminants included in the annual ~~emission~~ emissions inventory ~~report~~ to those contaminants identified under s. NR 445.11 (1) (a) or (b).

**SECTION 11. NR 438.03 (1) (am) 3. and 4. are created to read:**

**NR 438.03 (1)** (am) 3. The owner or operator of a facility may exclude from the annual emissions inventory, emissions from any of the following emissions units, operations, or activities:

a. Maintenance of grounds, equipment, and buildings, including lawn care, pest control, grinding, cutting, welding, painting, woodworking, general repairs, and cleaning, but not including use of organic compounds as clean−up solvents.

b. Boiler, turbine, generator, heating, and air conditioning maintenance.

c. Pollution control equipment maintenance.

d. Fire control equipment.

e. Janitorial activities.

f. Office activities.

g. Convenience water heating.

h. Convenience space heating units with combined heat input capacity of less than 5 million Btu per hour that burn gaseous fuels or liquid fuels.

i. Fuel oil storage tanks with a combined capacity of 10,000 gallons or less.

j. Stockpiled contaminated soils.

k. Demineralization and oxygen scavenging of water for boilers.

L. Purging of natural gas lines.

4. The owner or operator of a facility with emissions exceeding the reporting thresholds in this section shall include all emission units, operations, or activities in the annual emissions inventory. The owner or operator of a facility may exclude emissions information required under s. NR 438.04 (3) (d) for any emissions unit, operation, or activity that meets the criteria under s. NR 407.05 (4) (c) 9. a. If the department determines that an emission unit, operation, or activity does not meet the criteria under s. NR 407.05 (4) (c) 9. a., the owner or operator shall include the emissions in the annual emissions inventory.

**SECTION 12. NR 438.03 (1) (b), Table 1, (c), (d), (2), (3), (4) and (5) (title) and (a) are amended to read [Note to LRB: Please move Table 1 to end of chapter]:**

**NR 438.03 (1)** (b) When preparing an ~~emission~~ emissions inventory ~~report~~, the owner or operator of a facility may rely on information in an approved ~~material~~ safety data sheet. Trace contaminants need not be reported if they constitute less than 1~~%~~ percent (10,000 parts per million) of the material, or 0.1~~%~~ percent (1,000 parts per million) of the material if the air contaminant is listed with a control requirement ~~in~~under column (i) of Table A, B or C ~~or~~ of s. NR 445.07, unless a hazardous air contaminant is formed in processing the material.

**Table 1**
**Reporting Levels for Calendar Years 2004 and Later**

| Air Contaminant Name | CAS Number[1] | Reporting Level (lbs/yr) |
|---|---|---|
| Acetaldehyde | 75-07-0 | 404 |
| Acetamide | 60-35-5 | 6,000 |

| | | |
|---|---|---|
| Acetic acid | 64-19-7 | 5,774 |
| Acetic anhydride | 108-24-7 | 4,912 |
| Acetone | 67-64-1 | 100,000 |
| Acetonitrile | 75-05-8 | 6,000 |
| Acetophenone | 98-86-2 | 6,000 |
| 2-Acetylaminofluorene | 53-96-3 | 6,000 |
| Acrolein | 107-02-8 | 75 |
| Acrylamide | 79-06-1 | 0.683 |
| Acrylic acid | 79-10-7 | 88.8 |
| Acrylonitrile | 107-13-1 | 13.1 |
| Adipic acid | 124-04-9 | 1,176 |
| Adiponitrile | 111-69-3 | 2,080 |
| Adriamycin | 23214-92-8 | 1.22 |
| Aflatoxins | 1402-68-2 | 1.22 |
| Aldrin | 309-00-2 | 58.8 |
| Allyl alcohol | 107-18-6 | 279 |
| Allyl chloride | 107-05-1 | 736 |
| Allyl glycidyl ether | 106-92-3 | 1,098 |
| Aluminum alkyls and soluble salts, as Al | 7429-90-5[2] | 471 |
| Aluminum pyro powders, as Al | 7429-90-5[2] | 1,176 |
| o-Aminoazotoluene (2-Aminoazotoluene) | 97-56-3 | 0.808 |
| 4-Aminobiphenyl | 92-67-1 | 0.148 |
| Amitrole | 61-82-5 | 3.29 |
| [3]Ammonia | 7664-41-7 | 4,097 |
| Ammonium perfluorooctanoate | 3825-26-1 | 2.35 |
| Aniline | 62-53-3 | 1,792 |
| o-Anisidine and o-anisidine hydrochloride (mixtures and isomers) | 29191-52-4[2] | 22.2 |
| Antimony & compounds, as Sb | 7440-36-0[2] | 118 |
| Antimony trioxide | 1309-64-4 | 17.8 |

| | | |
|---|---|---|
| ANTU | 86-88-4 | 70.6 |
| Arsenic, elemental and inorganic compounds, as As | 7440-38-2[2] | 0.207 |
| [3]Arsine | 7784-42-1 | 4.44 |
| Asbestos, all forms | 1332-21-4[2] | 1.22 |
| Atrazine | 1912-24-9 | 1,176 |
| Azathioprine | 446-86-6 | 1.74 |
| Azinphos-methyl | 86-50-0 | 47.1 |
| Barium, soluble compounds, as Ba | 7440-39-3[2] | 118 |
| Benomyl | 17804-35-2 | 2,353 |
| Benz(a)anthracene | 56-55-3 | 8.08 |
| Benzene | 71-43-2 | 114 |
| Benzidine | 92-87-5 | 0.0133 |
| Benzo(a)phenanthrene (Chrysene) | 218-01-9 | 12 |
| Benzo(j,k)fluorene | 206-44-0 | 12 |
| Benzo(b)fluoranthene | 205-99-2 | 1.22 |
| Benzo(j)phenanthrene | 205-82-3 | 1.22 |
| Benzo(k)fluoranthene | 207-08-9 | 1.22 |
| Benzo(a)pyrene | 50-32-8 | 0.808 |
| Benzotrichloride | 98-07-7 | 1.22 |
| Benzoyl chloride | 98-88-4 | 940 |
| Benzoyl peroxide | 94-36-0 | 1,176 |
| Benzyl acetate | 140-11-4 | 6,000 |
| Benzyl chloride | 100-44-7 | 1,218 |
| Beryllium and beryllium compounds, as Be | 7440-41-7[2] | 0.37 |
| Biphenyl | 92-52-4 | 297 |
| Bischloroethyl nitrosourea | 154-93-8 | 1.22 |
| N,N-Bis (2-chloroethyl)-2-naphthylamine (Chlornaphazine) | 494-03-1 | 1.22 |
| Bis(chloromethyl) ether (BCME) and technical grade | 542-88-1 | 1.22 |
| Bis(2-dimethylaminoethyl) ether (DMAEE) | 3033-62-3 | 77.1 |

| | | |
|---|---|---|
| Bismuth telluride, as BI2Te3: Se-doped | 1304-82-1 | 1,176 |
| Borates, tetra, sodium salts, decahydrate | 1303-96-4[2] | 1,176 |
| Borates, tetra, sodium salts, pentahydrate | 1303-96-4[2] | 235 |
| Boron tribromide | 10294-33-4 | 3,352 |
| [3]Boron trifluoride | 7637-07-2 | 907 |
| Bromacil | 314-40-9 | 2,353 |
| [3]Bromine | 7726-95-6 | 154 |
| [3]Bromine pentafluoride | 7789-30-2 | 168 |
| Bromodichloromethane | 75-27-4 | 24 |
| Bromoform | 75-25-2 | 1,216 |
| 1,3-Butadiene | 106-99-0 | 3.17 |
| sec-Butanol | 78-92-2 | 100,000 |
| tert-Butanol | 75-65-0 | 100,000 |
| [4]2-Butoxyethanol (Ethylene glycol monobutyl ether; EGBE; Butyl cellosolve) | 111-76-2 | 6,000 |
| n-Butyl alcohol (n-Butanol) | 71-36-3 | 6,000 |
| n-Butyl acetate | 123-86-4 | 100,000 |
| t-Butyl acetate | 540-88-5 | see footnote 7 |
| n-Butyl acrylate | 141-32-2 | 2,467 |
| n-Butylamine | 109-73-9 | 4,892 |
| Butylated hydroxyanisole (BHA) | 25013-16-5 | 6,000 |
| tert-Butyl chromate, as Cr | 1189-85-1 | 0.074 |
| n-Butyl glycidyl ether (BGE) | 2426-08-6 | 6,000 |
| n-Butyl lactate | 138-22-7 | 6,000 |
| o-sec-Butylphenol | 89-72-5 | 6,000 |
| p-tert-Butyltoluene | 98-51-1 | 1,426 |
| C.I. Basic Red 9 monohydrochloride | 569-61-9 | 12.5 |
| Cadmium and cadmium compounds, as Cd | 7440-43-9[2] | 0.494 |
| Calcium cyanamide | 156-62-7 | 118 |
| Calcium hydroxide | 1305-62-0 | 1,176 |
| Calcium oxide | 1305-78-8 | 471 |

| | | |
|---|---|---|
| Camphor (synthetic) | 76-22-2 | 2,930 |
| Caprolactam (aerosol and vapor) | 105-60-2 | 5,444 |
| Captafol | 2425-06-1 | 23.5 |
| Captan | 133-06-2 | 1,176 |
| Carbaryl | 63-25-2 | 1,176 |
| Carbofuran | 1563-66-2 | 23.5 |
| Carbon dioxide | 124-38-9 | 100,000 tons |
| Carbon monoxide | 630-08-0 | 10,000 |
| Carbon black | 1333-86-4 | 823 |
| Carbon disulfide | 75-15-0 | 6,000 |
| Carbon tetrabromide | 558-13-4 | 319 |
| Carbon tetrachloride | 56-23-5 | 59.2 |
| Carbonyl fluoride | 353-50-4 | 1,270 |
| Carbonyl sulfide | 463-58-1 | 6,000 |
| Catechol (Pyrocatechol) | 120-80-9 | 5,298 |
| Refractory Ceramic Fibers (respirable size) | [2] | 1.22 |
| Cesium hydroxide | 21351-79-1 | 471 |
| Chloramben | 133-90-4 | 6,000 |
| Chlorambucil | 305-03-3 | 0.00683 |
| Chlordane | 57-74-9 | 118 |
| Chlorendic acid | 115-28-6 | 34.2 |
| Chlorinated camphene (Toxaphene) | 8001-35-2 | 2.78 |
| Chlorinated diphenyl oxide | 55720-99-5 | 118 |
| Chlorinated paraffins (C12; 60% chlorine) | 108171-26-2 | 35.5 |
| [3]Chlorine | 7782-50-5 | 341 |
| [3]Chlorine dioxide | 10049-04-4 | 64.9 |
| [3]Chlorine trifluoride | 7790-91-2 | 124 |
| Chloroacetic acid | 79-11-8 | 6,000 |
| 2-Chloroacetophenone | 532-27-4 | 74.4 |

| | | |
|---|---|---|
| Chlorobenzene (Monochlorobenzene) | 108-90-7 | 6,000 |
| Chlorobenzilate | 510-15-6 | 6,000 |
| o- Chlorobenzylidene malononitrile | 2698-41-1 | 126 |
| Chlorobromomethane | 74-97-5 | 100,000 |
| [3]1-Chloro-1, 1-difluoroethane (Hydrochlorofluorocarbon-142b; HCFC-142b; R-142b) | 75-68-3 | 6,000 |
| [3]Chlorodifluoromethane (Hydrochlorofluorocarbon-22; HCFC-22; R-22) | 75-45-6 | 6,000 |
| 1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU) | 13010-47-4 | 1.22 |
| [3]Chlorofluorocarbon-11 (CFC-11; R-11; Trichlorofluoromethane) | 75-69-4 | 6,000 |
| [3]Chlorofluorocarbon-111 (CFC-111) | 954-56-3 | 6,000 |
| [3]Chlorofluorocarbon-112 (CFC-112) | 76-12-0 | 6,000 |
| [3]Chlorofluorocarbon-113 (CFC-113; R-113; Trichlorotrifluoroethane) | 76-13-1 | 6,000 |
| [3]Chlorofluorocarbon-114 (CFC-114; R-114; Dichlorotetrafluoroethane) | 76-14-2 | 6,000 |
| [3]Chlorofluorocarbon-115 (CFC-115; R-115; Monochloropentafluoroethane) | 76-15-3 | 6,000 |
| [3]Chlorofluorocarbon-12 (CFC-12; R-12; Dichlorodifluoromethane) | 75-71-8 | 6,000 |
| [3]Chlorofluorocarbon-13 (CFC-13; R-13; Chlorotrifluoromethane) | 75-72-9 | 6,000 |
| [3]Chlorofluorocarbon-211 (CFC-211; R-211) | 422-78-6 | 6,000 |
| [3]Chlorofluorocarbon-212 (CFC-212; R-212) | 3182-26-1 | 6,000 |
| [3]Chlorofluorocarbon-213 (CFC-213; R-213) | 165-97-7 | 6,000 |
| [3]Chlorofluorocarbon-214 (CFC-214; R-214) | 29255-31-0 | 6,000 |
| [3]Chlorofluorocarbon-215 (CFC-215; R-215) | 4259-43-2 | 6,000 |
| [3]Chlorofluorocarbon-216 (CFC-216; R-216) | 661-97-2 | 6,000 |
| [3]Chlorofluorocarbon-217 (CFC-217; R-217) | 422-86-6 | 6,000 |
| Chloroform | 67-66-3 | 38.6 |
| Chloromethyl methyl ether (CMME) | 107-30-2 | 1.22 |
| 1-Chloro-1-nitropropane | 600-25-9 | 2,378 |
| Chloropicrin (Trichloronitromethane) | 76-06-2 | 158 |
| β-Chloroprene | 126-99-8 | 1.22 |
| o-Chlorostyrene | 2039-87-4 | 6,000 |
| o-Chlorotoluene | 95-49-8 | 6,000 |

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|---|---|---|
| Chlorpyrifos | 2921-88-2 | 47.1 |
| Chromium (metal) and compounds other than chromium (VI) | 7440-47-3[2] | 118 |
| Chromium (VI): Chromic acid mists and dissolved Cr (VI) aerosols, as Cr | 7440-47-3[2] | 0.074 |
| Chromium (VI) compounds and particulates | 7440-47-3[2] | 0.074 |
| Chromyl chloride, as Cr | 14977-61-8 | 0.074 |
| Cobalt, elemental, and inorganic compounds, as Co | 7440-48-4[2] | 4.71 |
| [3]Coke oven emissions | [2] | 1.43 |
| Copper and compounds, fume, as Cu | 7440-50-8[2] | 47.1 |
| Copper and compounds, dust & mists, as Cu | 7440-50-8[2] | 235 |
| p-Cresidine | 120-71-8 | 20.7 |
| Cresol (mixtures and isomers) | 1319-77-3[2] | 5,203 |
| Crotonaldehyde | 4170-30-3[2] | 281 |
| Crufomate | 299-86-5 | 1,176 |
| Cumene (Isopropyl benzene) | 98-82-8 | 6,000 |
| Cyanamide | 420-04-2 | 471 |
| Cyanides, (inorganics), as CN | 143-33-9[2] | 1,635 |
| Cyanogen | 460-19-5 | 5,008 |
| Cyanogen chloride | 506-77-4 | 247 |
| Cyclohexanol | 108-93-0 | 6,000 |
| Cyclohexanone | 108-94-1 | 6,000 |
| Cyclohexylamine | 108-91-8 | 6,000 |
| Cyclonite | 121-82-4 | 118 |
| Cyclopentadiene | 542-92-7 | 6,000 |
| Cyclophosphamide | 50-18-0 | 5.23 |
| Cyhexatin | 13121-70-5 | 1,176 |
| 2,4-D, salts and esters | 94-75-7 | 6,000 |
| Dacarbazine | 4342-03-4 | 0.0635 |
| DDE | 72-55-9 | 6,000 |
| Demeton | 8065-48-3 | 24.9 |

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|---|---|---|
| Diacetone alcohol | 123-42-2 | 6,000 |
| 2,4-Diaminoanisole sulfate | 39156-41-7 | 240 |
| 2,4-Diaminotoluene (Toluene-2,4-diamine) | 95-80-7[2] | 0.808 |
| Diazinon | 333-41-5 | 23.5 |
| Diazomethane | 334-88-3 | 80.9 |
| Dibenz(a,h)acridine | 226-36-8 | 8.08 |
| Dibenz(a,j)acridine | 224-42-0 | 8.08 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.74 |
| 7H-Dibenzo(c,g)carbazole | 194-59-2 | 0.808 |
| Dibenzofurans | 132-64-9[2] | 6,000 |
| Dibenzo(a,e)pyrene | 192-65-4 | 0.808 |
| Dibenzo(a,h)pyrene | 189-64-0 | 0.0808 |
| Dibenzo(a,i)pyrene | 189-55-9 | 0.0808 |
| Dibenzo(a,l)pyrene | 191-30-0 | 0.0808 |
| [3]Diborane | 19287-45-7 | 26.6 |
| 1,2-Dibromo-3-chloropropane (DBCP) | 96-12-8 | 0.468 |
| 1,2-Dibromoethane (Ethylene Dibromide; EDB) | 106-93-4 | 4.04 |
| 2-N-Dibutylaminoethanol | 102-81-8 | 834 |
| Dibutylphenylphosphate | 2528-36-1 | 826 |
| Dibutyl phthalate (Di-n-butylphthalate) | 84-74-2 | 1,176 |
| o-Dichlorobenzene (1,2-Dichlorobenzene) | 95-50-1 | 6,000 |
| p-Dichlorobenzene (1,4-Dichlorobenzene) | 106-46-7 | 80.8 |
| 3,3'-Dichlorobenzidine | 91-94-1 | 2.61 |
| 1,3-Dichloro-5,5-dimethyl hydantoin | 118-52-5 | 47.1 |
| Dichlorodiphenyltrichloroethane (DDT) | 50-29-3 | 9.16 |
| 1,1-Dichloroethane (Ethylidene dichloride) | 75-34-3 | 6,000 |
| 1,2-Dichloroethane (Ethylene dichloride; EDC) | 107-06-2 | 34.2 |
| Dichloroethyl ether (Bis(2-chloroethyl)ether) | 111-44-4 | 6,000 |
| 1,2-Dichloroethylene | 540-59-0 | 6,000 |

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| 1,1-Dichloro-1-nitroethane | 594-72-9 | 2,771 |
| 1,3-Dichloropropene | 542-75-6 | 222 |
| 2,2-Dichloropropionic acid | 75-99-0 | 1,176 |
| Dichlorvos | 62-73-7 | 44.4 |
| Dicrotophos | 141-66-2 | 58.8 |
| Dicyclopentadiene | 77-73-6 | 6,000 |
| Dieldrin | 60-57-1 | 58.8 |
| Diethanolamine | 111-42-2 | 471 |
| Diethylamine | 109-89-7 | 3,519 |
| 2-Diethylaminoethanol | 100-37-8 | 2,255 |
| Diethylene triamine | 111-40-0 | 993 |
| Diethyl hexyl phthalate (Bis(2-ethyl hexyl) phthalate; Di-sec-octyl phthalate; DEHP) | 117-81-7 | 1,176 |
| Diethyl phthalate | 84-66-2 | 1,176 |
| Diethylstilbestrol (DES) | 56-53-1 | 0.00888 |
| Diethyl sulfate | 64-67-5 | 1.22 |
| Diethyl ketone | 96-22-0 | 100,000 |
| 1,1-Difluoroethane | 75-37-6 | 6,000 |
| Diglycidyl ether (DGE) | 2238-07-5 | 125 |
| Diglycidyl resorcinol ether | 101-90-6 | 1.81 |
| 1,8-Dihydroxyanthroquinone (Danthron) | 117-10-2 | 40.4 |
| Diisobutyl ketone | 108-83-8 | 6,000 |
| Diisopropylamine | 108-18-9 | 4,869 |
| N,N-Dimethyl acetamide | 127-19-5 | 6,000 |
| Dimethylamine | 124-40-3 | 2,169 |
| 4-Dimethylaminoazobenzene | 60-11-7 | 0.683 |
| Dimethylaniline (N,N-Dimethylaniline) | 121-69-7 | 5,830 |
| 3,3'-Dimethylbenzidine (o-Tolidine) | 119-93-7 | 1.22 |
| Dimethyl carbamoyl chloride | 79-44-7 | 0.24 |
| Dimethylethoxysilane | 14857-34-2 | 501 |

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|---|---|---|
| N,N-Dimethylformamide | 68-12-2 | 2,665 |
| 1,1-Dimethylhydrazine | 57-14-7 | 1.22 |
| Dimethylphthalate | 131-11-3 | 1,176 |
| Dimethyl sulfate | 77-78-1 | 1.22 |
| Dinitolmide | 148-01-6 | 1,176 |
| Dinitrobenzene (mixtures and isomers) | 528-29-0[2] | 243 |
| Dinitro-o-cresol (4,6-Dinitro-o-cresol) | 534-52-1 | 47.1 |
| 2,4-Dinitrophenol | 51-28-5 | 6,000 |
| Dinitrotoluene (mixtures and isomers) | 25321-14-6[2] | 47.1 |
| n-Dioctyl phthalate | 117-84-0 | 6,000 |
| 1,4-Dioxane (1,4-Diethylene oxide) | 123-91-1 | 115 |
| Dioxathion | 78-34-2 | 47.1 |
| Diquat, respirable dust (various compounds) (Diquat dibromide) | 2764-72-9[2] | 23.5 |
| Diquat, total dust (various compounds) (Diquat dibromide) | 2764-72-9[2] | 118 |
| Direct black 38 (Benzidine-based dye) | 1937-37-7 | 0.423 |
| Direct blue 6 (Benzidine-based dye) | 2602-46-2 | 0.423 |
| Disperse Blue 1 | 2475-45-8 | 683 |
| Disulfiram | 97-77-8 | 471 |
| Disulfoton | 298-04-4 | 23.5 |
| Divinyl benzene (mixtures and isomers) | 1321-74-0[2] | 6,000 |
| Endosulfan | 115-29-7 | 23.5 |
| Endrin | 72-20-8 | 23.5 |
| Epichlorohydrin (1-Chloro-2,3-epoxypropane) | 106-89-8 | 88.8 |
| EPN | 2104-64-5 | 23.5 |
| 1,2-Epoxybutane (1,2-Butylene oxide) | 106-88-7 | 1,777 |
| Ethanolamine | 141-43-5 | 1,763 |
| Ethion | 563-12-2 | 94.1 |
| [4]2-Ethoxyethanol (Ethylene glycol monoethyl ether; EGEE; Cellosolve) | 110-80-5 | 4,336 |
| [4]2-Ethoxyethyl acetate (Ethylene glycol monoethyl ether acetate; EGEEA; Cellosolve acetate) | 111-15-9 | 6,000 |

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| Ethyl acetate | 141-78-6 | 100,000 |
| Ethyl acrylate | 140-88-5 | 4,817 |
| Ethylamine (Ethanamine) | 75-04-7 | 2,169 |
| Ethyl amyl ketone | 541-85-5 | 6,000 |
| Ethyl benzene | 100-41-4 | 6,000 |
| Ethyl bromide | 74-96-4 | 5,243 |
| Ethyl tert-butyl ether (ETBE) | 637-92-3 | 4,916 |
| Ethyl butyl ketone | 106-35-4 | 6,000 |
| Ethyl chloride (Chloroethane) | 75-00-3 | 6,000 |
| Ethyl cyanoacrylate | 7085-85-0 | 241 |
| Ethylene chlorohydrin | 107-07-3 | 1,077 |
| Ethylenediamine | 107-15-3 | 5,783 |
| Ethylene glycol vapor and aerosol | 107-21-1 | 6,000 |
| Ethylene oxide | 75-21-8 | 10.1 |
| Ethylene thiourea | 96-45-7 | 68.3 |
| Ethylenimine (Aziridine) | 151-56-4 | 207 |
| Ethylidene norbornene | 16219-75-3 | 6,000 |
| N-Ethylmorpholine | 100-74-3 | 5,542 |
| Ethyl silicate | 78-10-4 | 6,000 |
| Fenamiphos | 22224-92-6 | 23.5 |
| Fensulfothion | 115-90-2 | 23.5 |
| Fenthion | 55-38-9 | 47.1 |
| Fine mineral fibers (includes mineral fiber emissions from facilities manufacturing or processing glass, rock or slag fibers, or other mineral derived fibers, of average diameter 1 micrometer or less) | [2] | 6,000 |
| Flour dust (inhalable fraction) | [2] | 118 |
| Fluorides, (inorganics), as F | [2] | 588 |
| [3]Fluorine | 7782-41-4 | 366 |
| Fonofos | 944-22-9 | 23.5 |
| Formaldehyde | 50-00-0 | 68.3 |

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|---|---|---|
| Formamide | 75-12-7 | 4,334 |
| Formic acid | 64-18-6 | 2,214 |
| Furan | 110-00-9 | 1.22 |
| Furfural | 98-01-1 | 1,849 |
| Furfuryl alcohol | 98-00-0 | 6,000 |
| [3]Germanium tetrahydride | 7782-65-2 | 147 |
| Glutaraldehyde | 111-30-8 | 67 |
| Glycidol | 556-52-5 | 1.22 |
| [5]Glycol ethers | [2] | 6,000 |
| Graphite (all forms except graphite fiber) | 7782-42-5 | 471 |
| [3]Halon-1211 (Bromochlorodifluoromethane) | 353-59-3 | 6,000 |
| [3]Halon-1301 (Bromotrifluoromethane) | 75-63-8 | 6,000 |
| [3]Halon-2402 (Dibromotetrafluoroethane) | 124-73-2 | 6,000 |
| Heptachlor and heptachlor epoxide | 76-44-8 | 11.8 |
| Hexachlorobenzene (HCB) | 118-74-1 | 0.471 |
| Hexachlorobutadiene | 87-68-3 | 50.2 |
| Hexachlorocyclopentadiene | 77-47-4 | 26.2 |
| Hexachloroethane | 67-72-1 | 222 |
| Hexachloronaphthalene | 1335-87-1 | 47.1 |
| Hexamethyl phosphoramide | 680-31-9 | 1.22 |
| Hexamethylene-1,6-diisocyanate (HDI) | 822-06-0 | 0.888 |
| n-Hexane | 110-54-3 | 6,000 |
| 1,6- Hexanediamine | 124-09-4 | 559 |
| 1-Hexene | 592-41-6 | 6,000 |
| sec-Hexyl acetate | 108-84-9 | 6,000 |
| Hexylene glycol | 107-41-5 | 6,000 |
| Hydrazine and hydrazine sulfate | 302-01-2[2] | 0.181 |
| [3]Hydrochlorofluorocarbon-121 (HCFC-121) | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-122 (HCFC-122) | [2] | 6,000 |

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| [3]Hydrochlorofluorocarbon-123 (HCFC-123, R-123)..... | 306-83-2[2] | 6,000 |
| [3]Hydrochlorofluorocarbon-124 (HCFC-124, R-124)..... | 63938-10-3[2] | 6,000 |
| [3]Hydrochlorofluorocarbon-131 (HCFC-131)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-132b (HCFC-132b)..... | 1649-08-7 | 6,000 |
| [3]Hydrochlorofluorocarbon-133a (HCFC-133a) ..... | 75-88-7 | 6,000 |
| [3]Hydrochlorofluorocarbon-141b (HCFC-141b, R-141b)..... | 1717-00-6 | 6,000 |
| [3]Hydrochlorofluorocarbon-21 (HCFC-21, Dichlorofluoromethane) ..... | 75-43-4 | 6,000 |
| [3]Hydrochlorofluorocarbon-221 (HCFC-221)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-222 (HCFC-222)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-223 (HCFC-223)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-224 (HCFC-224)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-225 ca (HCFC-225ca)..... | 422-56-0 | 6,000 |
| [3]Hydrochlorofluorocarbon-225 cb (HCFC-225cb) ..... | 507-55-1 | 6,000 |
| [3]Hydrochlorofluorocarbon-226 (HCFC-226)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-231 (HCFC-231)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-232 (HCFC-232)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-233 (HCFC-233)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-234 (HCFC-234)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-235 (HCFC-235)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-241 (HCFC-241)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-242 (HCFC-242)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-243 (HCFC-243)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-244 (HCFC-244)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-251 (HCFC-251)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-252 (HCFC-252)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-253 (HCFC-253)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-261 (HCFC-261)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-262 (HCFC-262)..... | [2] | 6,000 |
| [3]Hydrochlorofluorocarbon-271 (HCFC-271)..... | [2] | 6,000 |

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| [3]Hydrochlorofluorocarbon-31 (HCFC-31; R-31; Chlorofluoromethane) | 593-70-4 | 6,000 |
| Hydrogenated terphenyls | 61788-32-7 | 1,160 |
| [3]Hydrogen bromide | 10035-10-6 | 3,247 |
| [3]Hydrogen chloride (Hydrochloric acid; Muriatic acid) | 7647-01-0 | 1,777 |
| [3]Hydrogen cyanide | 74-90-8 | 1,699 |
| [3]Hydrogen fluoride (Hydrofluoric acid) | 7664-39-3 | 803 |
| [3]Hydrogen peroxide | 7722-84-1 | 327 |
| [3]Hydrogen sulfide | 7783-06-4 | 3,279 |
| Hydroquinone | 123-31-9 | 471 |
| 2-Hydroxypropyl acrylate | 999-61-1 | 626 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | 8.08 |
| Indium | 7440-74-6 | 23.5 |
| [3]Iodine | 7553-56-2 | 340 |
| Iron dextran complex | 9004-66-4 | 1.22 |
| Iron oxide dust and fume, as Fe | 1309-37-1 | 1,176 |
| Iron salts, soluble, as Fe | [2] | 235 |
| Isobutyl acetate | 110-19-0 | 100,000 |
| Isobutyl alcohol | 78-83-1 | 6,000 |
| Isooctyl alcohol | 26952-21-6 | 6,000 |
| Isophorone | 78-59-1 | 6,000 |
| Isophorone diisocyanate | 4098-71-9 | 10.7 |
| Isoprene | 78-79-5 | 1.22 |
| [4]2-Isopropoxyethanol | 109-59-1 | 6,000 |
| Isopropylamine | 75-31-0 | 2,843 |
| Isopropyl glycidyl ether | 4016-14-2 | 6,000 |
| N-Isopropylaniline | 768-52-5 | 2,602 |
| Kaolin | 1332-58-7 | 471 |
| Kepone (Chlordecone) | 143-50-0 | 0.193 |
| Ketene | 463-51-4 | 202 |

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| Lead Acetate, as Pb | 301-04-2 | 11.1 |
| Lead compounds | 7439-92-1[2] | 400 |
| Lead Phosphate, as Pb | 7446-27-7 | 74 |
| Lindane and other hexachlorocyclohexane isomers | 58-89-9[2] | 2.87 |
| Maleic anhydride | 108-31-6 | 94.4 |
| Manganese, dust and inorganic compounds, as Mn | 7439-96-5[2] | 47.1 |
| Melphalan | 148-82-3 | 0.024 |
| [3]Mercury, as Hg, alkyl compounds | 7439-97-6[2] | 2.35 |
| [3]Mercury, as Hg, aryl compounds | 7439-97-6[2] | 23.5 |
| [3]Mercury, as Hg, inorganic forms including metallic mercury, | 7439-97-6[2] | 5.88 |
| Mesityl oxide | 141-79-7 | 6,000 |
| Mestranol | 72-33-3 | 1.22 |
| Methacrylic acid | 79-41-4 | 6,000 |
| Methanol | 67-56-1 | 6,000 |
| Methomyl | 16752-77-5 | 588 |
| Methoxychlor | 72-43-5 | 6,000 |
| [4]2-Methoxyethanol (Methyl Cellosolve; EGME) | 109-86-4 | 3,661 |
| [4]2-Methoxyethyl acetate (MethylCellosolve acetate; EGMEA) | 110-49-6 | 5,684 |
| 4-Methoxyphenol | 150-76-5 | 1,176 |
| [3]Methyl chloroform (1,1,1-Trichloroethane; TCA) | 71-55-6 | 6,000 |
| Methyl ethyl ketone (2-Butanone; MEK) | 78-93-3 | 6,000 |
| Methyl acetate | 79-20-9 | 100,000 |
| Methyl acetylene | 74-99-7 | 100,000 |
| Methyl acrylate | 96-33-3 | 1,657 |
| Methylacrylonitrile | 126-98-7 | 646 |
| Methylamine | 74-89-5 | 1,494 |
| Methyl n-amyl ketone | 110-43-0 | 6,000 |
| N-Methyl aniline | 100-61-8 | 516 |
| Methyl bromide (Bromomethane) | 74-83-9 | 444 |

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| Methyl n-butyl ketone | 591-78-6 | 4,819 |
| Methyl chloride (Chloromethane) | 74-87-3 | 6,000 |
| 5-Methyl chrysene | 3697-24-3 | 0.808 |
| Methyl 2-cyanoacrylate | 137-05-3 | 214 |
| Methylcyclohexanol | 25639-42-3 | 6,000 |
| o-Methylcyclohexanone | 583-60-8 | 6,000 |
| Methyl demeton | 8022-00-2 | 118 |
| Methylene bisphenyl isocyanate (Methylene diphenyl isocyanate; MDI) | 101-68-8 | 12 |
| [3]Methylene chloride (Dichloromethane) | 75-09-2 | 1,890 |
| 4,4'-Methylene bis(2-chloroaniline) (MOCA) | 101-14-4 | 2.07 |
| Methylene bis(4-cyclohexylisocyanate) | 5124-30-1 | 12.6 |
| 4,4'-Methylenedianiline (and dihydrochloride) | 101-77-9[2] | 1.93 |
| Methyl ethyl ketone peroxide | 1338-23-4 | 472 |
| Methyl formate | 107-31-3 | 6,000 |
| Methyl hydrazine | 60-34-4 | 4.43 |
| Methyl iodide (Iodomethane) | 74-88-4 | 2,732 |
| Methyl isoamyl ketone | 110-12-3 | 6,000 |
| Methyl isobutyl carbinol | 108-11-2 | 6,000 |
| Methyl isobutyl ketone (MIBK; Hexone) | 108-10-1 | 6,000 |
| Methyl isocyanate | 624-83-9 | 11 |
| Methyl methacrylate | 80-62-6 | 6,000 |
| N-Methyl-N'-nitro-N-nitrosoguanidine (MNNG) | 70-25-7 | 0.37 |
| Methyl parathion | 298-00-0 | 47.1 |
| α-Methyl styrene | 98-83-9 | 6,000 |
| Methyl tert-butyl ether (MTBE) | 1634-04-4 | 6,000 |
| Metribuzin | 21087-64-9 | 1,176 |
| Mevinphos (Phosdrin) | 7786-34-7 | 21.2 |
| Mirex | 2385-85-5 | 0.174 |
| Molybdenum, as Mo, metal and insoluble compounds | 7439-98-7[2] | 2,353 |

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| Molybdenum, as Mo, soluble compounds | 7439-98-7[2] | 1,176 |
| Monocrotophos | 6923-22-4 | 58.8 |
| Morpholine | 110-91-8 | 6,000 |
| Mustard gas | 505-60-2 | 1.22 |
| Myleran (1,4-Butanediol dimethanesulphonate; Busulphan) | 55-98-1 | 1.22 |
| Naled | 300-76-5 | 706 |
| Naphthalene | 91-20-3 | 6,000 |
| 2-Naphthylamine | 91-59-8 | 1.22 |
| Nickel and compounds, as Ni | 7440-02-0[2] | 3.42 |
| Nickel carbonyl, as Ni | 13463-39-3 | 3.42 |
| Nickel subsulfide, as Ni | 12035-72-2 | 1.85 |
| Nitric acid | 7697-37-2 | 1,213 |
| Nitrilotriacetic acid | 139-13-9 | 592 |
| p-Nitroaniline | 100-01-6 | 706 |
| Nitrobenzene | 98-95-3 | 1,185 |
| 4-Nitrobiphenyl | 92-93-3 | 6,000 |
| p-Nitrochlorobenzene | 100-00-5 | 152 |
| Nitroethane | 79-24-3 | 6,000 |
| Nitrogen mustards (2,2'-Dichloro-N-methyldiethylamine) | 51-75-2 | 1.22 |
| [3]Nitrogen oxides | [2] | 10,000 |
| Nitromethane | 75-52-5 | 6,000 |
| 4-Nitrophenol | 100-02-7 | 6,000 |
| 1-Nitropropane | 108-03-2 | 6,000 |
| 2-Nitropropane | 79-46-9 | 1.22 |
| 1-Nitropyrene | 5522-43-0 | 8.08 |
| N-Nitrosodi-n-butylamine | 924-16-3 | 0.555 |
| N-Nitrosodiethanolamine | 1116-54-7 | 1.11 |
| N-Nitrosodiethylamine | 55-18-5 | 0.0207 |
| N-Nitrosodimethylamine | 62-75-9 | 0.0635 |

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|---|---|---|
| N-Nitrosodi-n-propylamine | 621-64-7 | 0.444 |
| N-Nitroso-N-ethylurea | 759-73-9 | 0.115 |
| N-Nitroso-N-methylurea | 684-93-5 | 0.0261 |
| N-Nitrosomethylvinylamine | 4549-40-0 | 1.22 |
| N-Nitrosomorpholine | 59-89-2 | 0.468 |
| N'-Nitrosonornicotine | 16543-55-8 | 1.22 |
| N-Nitrosopiperidine | 100-75-4 | 0.329 |
| N-Nitrosopyrrolidine | 930-55-2 | 1.46 |
| N-Nitrososarcosine | 13256-22-9 | 1.22 |
| Nitrotoluene, mixtures and isomers | 88-72-2[2] | 2,639 |
| Nitrous oxide | 10024-97-2 | 6,000 |
| Octachloronaphthalene | 2234-13-1 | 23.5 |
| Octachlorostyrene | 29082-74-4 | 10 |
| Octane (all isomers) | 111-65-9[2] | 100,000 |
| Oestradiol (Estradiol) | 50-28-2 | 0.0808 |
| Oxalic acid | 144-62-7 | 235 |
| p,p'-Oxybis (benzenesulfonyl hydrazide) | 80-51-3 | 23.5 |
| Paraquat (respirable sizes) (Paraquat chloride) | 1910-42-5[2] | 23.5 |
| Parathion | 56-38-2 | 23.5 |
| ~~[3]Particulate matter~~ | ~~3~~ | ~~10,000~~ |
| Pentachlorobenzene | 608-93-5 | 10 |
| Pentachloronaphthalene | 1321-64-8 | 118 |
| Pentachloronitrobenzene (Quintobenzene; PCNB) | 82-68-8 | 118 |
| Pentachlorophenol (PCP) | 87-86-5 | 118 |
| Pentane, all isomers | 78-78-4[*2] | 100,000 |
| Pentyl Acetate (mixtures and isomers) | 628-63-7[2] | 6,000 |
| [3]Perchloroethylene (Tetrachloroethylene) | 127-18-4 | 151 |
| Perchloromethyl mercaptan | 594-42-3 | 179 |
| Perfluoroisobutylene | 382-21-8 | 26.7 |

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|---|---|---|
| Persulfates (Ammonium, Potassium, Sodium) | 7727-54-0[2] | 23.5 |
| Perylene | 198-55-0 | 10 |
| Phenazopyridine and phenazopyridine hydrochloride | 136-40-3[2] | 18.1 |
| Phenol | 108-95-2 | 4,528 |
| Phenolphthalein | 77-09-8 | 1.22 |
| Phenothiazine | 92-84-2 | 1,176 |
| Phenylenediamine (mixtures and isomers) | 106-50-3 | 23.5 |
| Phenyl ether vapor | 101-84-8 | 1,638 |
| Phenyl glycidyl ether (PGE) | 122-60-1 | 145 |
| Phenylhydrazine | 100-63-0 | 104 |
| Phenyl mercaptan | 108-98-5 | 530 |
| Phenytoin and sodium salt of phenytoin | 57-41-0[2] | 1.22 |
| Phorate | 298-02-2 | 11.8 |
| Phosgene | 75-44-5 | 95.2 |
| [3]Phosphine | 7803-51-2 | 98.2 |
| Phosphoric acid | 7664-38-2 | 235 |
| Phosphorus (yellow) | 7723-14-0 | 23.8 |
| Phosphorus oxychloride | 10025-87-3 | 148 |
| [3]Phosphorus pentachloride | 10026-13-8 | 200 |
| Phosphorus pentasulfide | 1314-80-3 | 235 |
| [3]Phosphorus trichloride | 7719-12-2 | 264 |
| Phthalic anyhydride | 85-44-9 | 1,425 |
| Picric acid | 88-89-1 | 23.5 |
| Pindone | 83-26-1 | 23.5 |
| Platinum (metal) | 7440-06-4 | 235 |
| Platinum, soluble salts, as Pt | 7440-06-4[2] | 0.471 |
| ~~PM10~~ | ~~3~~ | ~~10,000~~ |
| Polybrominated biphenyls (PBBs; Bromodiphenyls) | 59536-65-1[2] | 0.103 |
| Polychlorinated biphenyls (PCBs; Chlorodiphenyls; Arochlor) | 1336-36-3[2] | 0.05 |

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|---|---|---|
| Polycyclic organic matter (POM) | [2] | 125 |
| Potassium hydroxide | 1310-58-3 | 654 |
| [3]Primary particulate matter | [2] | 10,000 |
| Primary $PM_{2.5}$. Also report filterable and condensable components. | [2] | 10,000 |
| Primary $PM_{10}$. Also report filterable and condensable components. | [2] | 10,000 |
| Procarbazine and procarbazine hydrochloride | 366-70-1[2] | 0.222 |
| 1,3-Propane sultone | 1120-71-4 | 1.29 |
| Propargyl alcohol | 107-19-7 | 539 |
| β-Propiolactone | 57-57-8 | 0.222 |
| Propionaldehyde | 123-38-6 | 6,000 |
| Propionic acid | 79-09-4 | 6,000 |
| Propoxur (Baygon) | 114-26-1 | 118 |
| Propylene dichloride (1,2-Dichloropropane) | 78-87-5 | 355 |
| Propylene glycol monomethyl ether (PGME) | 07-98-2 | 6,000 |
| Propylene oxide | 75-56-9 | 240 |
| Propylenimine (2-Methyl aziridine; Propylene imine) | 75-55-8 | 1.22 |
| Propylthiouracil | 51-52-5 | 3.06 |
| Pyrethrum | 8003-34-7 | 1,176 |
| Pyridine | 110-86-1 | 3,373 |
| Quinoline | 91-22-5 | 6,000 |
| Quinone | 106-51-4 | 104 |
| Resorcinol | 108-46-3 | 6,000 |
| Rhodium (metal) and insoluble compounds, as Rh | 7440-16-6[2] | 235 |
| Rhodium, soluble compounds, as Rh | 7440-16-6[2] | 2.35 |
| Rotenone (commercial) | 83-79-4 | 1,176 |
| Safrole | 94-59-7 | 14.1 |
| Selenium and compounds, as Se | 7782-49-2[2] | 47.1 |
| [3]Silicon tetrahydride (Silane) | 7803-62-5 | 1,545 |
| Sodium Azide, as sodium azide or hydrazoic acid vapor | 26628-22-8 | 95.7 |

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|---|---|---|
| Sodium bisulfite | 7631-90-5 | 1,176 |
| Sodium fluoroacetate | 62-74-8 | 11.8 |
| Sodium hydroxide | 1310-73-2 | 654 |
| Sodium metabisulfite | 7681-57-4 | 1,176 |
| [3]Stibine (Antimony hydride) | 7803-52-3 | 120 |
| Stoddard solvent (Mineral spirits) | 8052-41-3 | 6,000 |
| Streptozotocin | 18883-66-4 | 0.0287 |
| Strong inorganic acid mists containing sulfuric acid (>35% by weight) | 7664-93-9[2] | 1.22 |
| Strychnine | 57-24-9 | 35.3 |
| Styrene oxide | 96-09-3 | 6,000 |
| Styrene, monomer | 100-42-5 | 6,000 |
| Sulfometuron methyl | 74222-97-2 | 1,176 |
| Sulfotep (TEDP) | 3689-24-5 | 47.1 |
| [3]Sulfur dioxide | 7446-09-5 | 10,000 |
| Sulfur monochloride | 10025-67-9 | 1,806 |
| [3]Sulfur tetrafluoride | 7783-60-0 | 145 |
| Sulfuric acid | 7664-93-9 | 235 |
| [3]Sulfuryl fluoride | 2699-79-8 | 4,911 |
| Sulprofos | 35400-43-2 | 235 |
| Talc, containing no asbestos fibers | 14807-96-6 | 471 |
| Tantalum, metal and oxide dusts, as Ta | 7440-25-7 | 1,176 |
| Tellurium and compounds, except hydrogen telluride, as Te | 13494-80-9[2] | 23.5 |
| TEPP | 107-49-3 | 11.8 |
| Terphenyls | 26140-60-3[2] | 1,635 |
| 1,2,3,4-Tetrachlorobenzene | 634-66-2 | 10 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 10 |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin (Dioxin; 2,3,7,8-TCDD), as dioxin equivalents | 1746-01-6[2] | 0.00005 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 1,615 |
| Tetrachloronaphthalene | 1335-88-2 | 471 |

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|---|---|---|
| 1,1,1,2-Tetrafluoroethane | 811-97-2 | 6,000 |
| Tetrafluoroethylene | 116-14-3 | 1.22 |
| Tetrahydrofuran | 109-99-9 | 6,000 |
| Tetranitromethane | 509-14-8 | 1.22 |
| Thallium, elemental and soluble compounds, as Tl | 7440-28-0[2] | 23.5 |
| [3]Thionyl chloride | 7719-09-7 | 1,592 |
| Thiourea | 62-56-6 | 42.3 |
| Thiram | 137-26-8 | 235 |
| Tin organic compounds, as Sn | 7440-31-5[2] | 23.5 |
| Tin, metal oxides and inorganic compounds, except tin hydride, as Sn | 7440-31-5[2] | 471 |
| Titanium tetrachloride | 7550-45-0 | 6,000 |
| Toluene (Toluol) | 108-88-3 | 6,000 |
| 2,4-/2,6-Toluene diisocyanate (mixtures and isomers) (TDI) | 584-84-9[2] | 6.22 |
| m- and p-Toluidine | 108-44-1 | 2,062 |
| o-Toluidine and o-toluidine hydrochloride and mixed isomers | 95-53-4[2] | 17.4 |
| [3]Total reduced sulfur and reduced sulfur compounds | [2] | 10,000 |
| Tributyl phosphate | 126-73-8 | 513 |
| Tributyl tin | 56-35-9 | 10 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 6,000 |
| 1,1,2-Trichloroethane | 79-00-5 | 6,000 |
| Trichloroethylene (Trichloroethene) | 79-01-6 | 444 |
| Trichloronaphthalene | 1321-65-9 | 1,176 |
| 2,4,5-Trichlorophenol | 95-95-4 | 6,000 |
| 2,4,6-Trichlorophenol | 88-06-2 | 287 |
| 1,2,3-Trichloropropane | 96-18-4 | 1.22 |
| Triethanolamine | 102-71-6 | 1,176 |
| Triethylamine | 121-44-8 | 974 |
| Trifluralin | 1582-09-8 | 6,000 |
| 1,3,5-Triglycidyl-s-triazinetrione | 2451-62-9 | 11.8 |

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|---|---|---|
| Trimellitic anhydride | 552-30-7 | 13.1 |
| Trimethyl benzene, (mixtures and isomers) | 25551-13-7[2] | 6,000 |
| Trimethylamine | 75-50-3 | 2,844 |
| 2,2,4-Trimethylpentane | 540-84-1 | 6,000 |
| 2,4,6-Trinitrotoluene (TNT) | 118-96-7 | 23.5 |
| Triorthocresyl phosphate | 78-30-8 | 23.5 |
| Triphenyl phosphate | 115-86-6 | 706 |
| Tris(1-aziridinyl)phosphine sulfide (Thiotepa) | 52-24-4 | 0.261 |
| Tris(2,3-dibromopropyl phosphate) | 126-72-7 | 1.35 |
| Tungsten - metal and insoluble compounds, as W | 7440-33-7[2] | 1,176 |
| Tungsten - soluble compounds, as W | 7440-33-7[2] | 235 |
| Uranium (natural), soluble and insoluble compounds, as U | 7440-61-1[2] | 47.1 |
| Urethane (Ethyl carbamate) | 51-79-6 | 3.06 |
| n-Valeraldehyde | 110-62-3 | 6,000 |
| Vanadium pentoxide, as $V_2O_5$, respirable dust and fume | 1314-62-1 | 11.8 |
| Vinyl acetate | 108-05-4 | 6,000 |
| Vinyl bromide | 593-60-2 | 515 |
| Vinyl chloride | 75-01-4 | 101 |
| Vinyl cyclohexene dioxide (4-Vinyl-1-cyclohexene diepoxide) | 106-87-6 | 1.22 |
| 4-Vinyl cyclohexene | 100-40-3 | 104 |
| Vinyl fluoride | 75-02-5 | 443 |
| Vinylidene chloride (1,1-Dichloroethylene) | 75-35-4 | 4,665 |
| Vinylidine fluoride | 75-38-7 | 100,000 |
| Vinyl toluene | 25013-15-4 | 6,000 |
| [3,6]Volatile organic compounds (Reactive organic gases) | [2] | 6,000 |
| Warfarin | 81-81-2 | 23.5 |
| Xylene (mixtures and isomers) (Xylol; Dimethyl Benzene) | 1330-20-7[2] | 6,000 |
| m-Xylene-α,α'-diamine | 1477-55-0 | 32.7 |
| Xylidine (mixtures and isomers) | 1300-73-8[2] | 583 |

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|---|---|---|
| Yttrium metal and compounds, as Y | 7440-65-5[2] | 235 |
| Zeolites (Erionite) | 66733-21-9 | 1.22 |
| Zirconium and compounds, as Zr | 7440-67-7[2] | 1,176 |

[1]Chemical Abstract Service or CAS number refers to the unique chemical abstracts service registry number assigned to a specific chemical, isomer or mixture of chemicals or isomers and recorded in the CAS chemical registry system by the Chemical Abstracts Service, PO Box 3012, Columbus, OH 43210, phone 1-614-447-3600.

[2]Indicates contaminants for which multiple CAS numbers may apply. For contaminants listed as a metal and its compounds, the given CAS number refers to the metal.

[3]Indicates contaminants for which a fee will be assessed under s. NR 410.04. Emissions of all compounds listed in s. NR 400.02(162)(b) shall be included when determining fees for volatile organic compounds.

[4]Indicates compounds included in the glycol ethers group. In addition to being reported individually when a compound's emissions are above the reporting level, the emissions of these compounds are included in the glycol ethers emission total reported along with emissions of the many other such compounds not listed individually by name.

[5]Glycol ethers include mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol, R-$(OCH_2CH_2)_n$-OR'
where:
n=1, 2 or 3
R=alkyl C7 or less or
R=phenyl or alkyl substituted phenyl
R'=H or alkyl C7 or less or OR' consists of carboxylic acid ester, sulfate, phosphate, nitrate or sulfonate.

[6]Organic compounds that are not VOC and should not be considered or included here are specified in s. NR 400.02 (162) (a). Emissions of organic compounds specified in s. NR 400.02 (162) (b) shall be considered to determine if the reporting level for VOC is exceeded. Emissions of these compounds, however, shall be reported separately as the individual compound if the reporting level for VOC is exceeded.

[7]Any amount of emissions of this compound shall be reported if the reporting level for VOC emissions is exceeded. See footnote 6 for how to determine if the reporting level for VOC emissions is exceeded.

(c) Notwithstanding par. (a), the department may require any facility to submit an ~~emission~~ emissions inventory ~~report~~ of its annual, actual and maximum theoretical air contaminant emissions.

(d) Any facility that ~~has~~generates or holds emission reduction credits shall report the credits separately ~~as actual emissions on the annual emission inventory report~~to the annual emissions inventory.

**(2)** REPORTING DEADLINE. ~~Reports~~ Emissions inventories required under this section shall be submitted by March 1 of each year for air contaminants emitted during the preceding year. ~~Persons unable to submit reports by March 1 may, upon request to the department, be granted an extension until March 15 for submission of the reports if the department determines that an extension is reasonable under the circumstances~~ Through March 1, persons may be granted a 2-week submittal extension ending on March 15, when requested by email, mail, or other manner prescribed, provided the extension is considered reasonable under the circumstances by the department.

**(3)** PORTABLE SOURCES. The owner or operator of a portable source shall file ~~one emission~~ an emissions inventory ~~report~~ covering all operations at all locations in the state during the previous year.

**(4)** REQUIRED RECORDS. ~~Owners and operators~~An owner or operator of ~~facilities~~a facility required to file ~~emission inventory reports~~ emissions inventories shall keep accurate and reliable records sufficient to enable verification of the ~~reports~~ emissions inventories by the department. Records shall include data

on fuel composition and consumption, composition and quantities of raw materials handled ~~which~~that contribute to emissions, composition and quantities of wastes incinerated, continuous emissions monitoring data and audits, and any results of stack or performance tests together with the names of persons or firms responsible for each test, if applicable. Records shall be retained for 5 years following the year in which the ~~emission~~ emissions inventory ~~report~~ is submitted.

**(5)** ~~EMISSION~~ EMISSIONS INVENTORY AND CERTIFICATION. (a) Based on the throughput or emissions information submitted ~~pursuant to ss. NR 438.03~~under this section and s. NR 438.04, the department shall determine each facility's annual actual emissions and typical ozone season day emissions based on emission factors contained in Compilation of Air Pollutant Emission Factors, AP-42, Volume 1: Stationary Point and Area Sources, USEPA-OAQPS, ~~January 1995,~~ as incorporated by reference ~~in~~under s. NR 484.05 (8), or in the ~~FIRE database, USEPA-OAQPS, incorporated by reference in s. NR 484.06 (4) (a)~~ EPA's online database of emissions factors for criteria and hazardous air pollutants. Other emission factors or methods, including~~, but not limited to,~~ mass balance or other use reporting, consumption and analytical methodologies, or continuous emissions monitoring data, if applicable, may be used by the department.

**SECTION 13. NR 438.03 (5) (a) (Note) is created to read:**

**NR 438.03 (5)** (a) Note: The EPA's WebFIRE database of emissions factors for criteria and hazardous air pollutants is available at https://cfpub.epa.gov/webfire/.

**SECTION 14. NR 438.03 (5) (b), (c), and (6) are amended to read:**

**NR 438.03 (5)** (b) The actual annual emissions determined by the department under par. (a) shall constitute the department's annual ~~emission~~ emissions inventory.

(c) By May 31 of each year, the department shall send each owner or operator of a facility ~~which~~that is required to file an ~~emission inventory report a summary from the department's annual emission inventory~~ emissions inventory a notification that an emissions inventory summary report of the air contaminants emitted by the facility for the previous year has been created by the department. The owner or operator of a facility required to obtain an air pollution control permit under s. 285.60, Stats., and ch. NR 405, 406, 407, or 408, or ~~which~~that emits volatile organic compounds or nitrogen oxides in an ozone nonattainment area, shall, by June 30 of each year, send a written certification to the department that ~~the summary of~~ its emissions inventory summary report is correct. The certification shall contain the name, title, signature and telephone number of the ~~certifier~~ responsible official, the date of certification,

and a statement that the information contained in the emissions inventory summary report is accurate to the best knowledge of the owner or operator of that facility.

**(6)** DISPUTED EMISSIONS. Any facility that disputes the emissions inventory summary ~~supplied~~ report created by the department under sub. (5) (c) may request, in writing, that the department review its emissions inventory summary report. The department shall review and supply to the facility, within 14 calendar days of receipt of the facility's written request, information used to prepare the ~~emission~~ emissions inventory ~~and~~ summary report for that facility. If the facility continues to dispute the emissions inventory summary report, it shall supply to the department, within 14 calendar days of receipt of the department's information, the reasons it disputes the ~~summary~~ report. The facility shall be notified within 7 calendar days of receipt of this information of the department's decision on whether to adjust the ~~emission~~ emissions inventory and ~~summary~~recreate the emissions inventory summary report. If the facility continues to dispute the emissions inventory summary report, it may appeal the department's final decision pursuant to state law. The responsible official for the facility shall certify any emissions not in dispute by June 30 of each year.

**SECTION 15. NR 438.04 (1) is amended to read:**

**NR 438.04 Content of ~~emission inventory reports~~ emissions inventories. (1)** GENERAL INSTRUCTIONS. ~~Emission inventory reports~~ Emissions inventories required under this chapter shall be submitted ~~on forms or other media supplied~~in the manner prescribed by the department. ~~Emission inventory reports~~ Emissions inventories submitted by facilities shall contain the information specified ~~in~~under s. NR 438.03 (1) and (3) and this section. Emissions shall be reported separately for each ~~source~~ process or group of similar ~~sources~~ processes at each facility.

**SECTION 16. NR 438.04 (1) (Note) is repealed.**

**SECTION 17. NR 438.04 (2) (intro.) and (b) are amended to read:**

**NR 438.04 (2)** FACILITY IDENTIFICATION AND GENERAL INFORMATION. For all facilities the ~~emission inventory report~~ emissions inventories shall include:

(b) The location address of the facility.

**SECTION 18. NR 438.04 (2) (c) is repealed.**

**SECTION 19. NR 438.04 (2) (d) is repealed and recreated to read:**

**NR 438.04 (2)** (d) The facility's applicable NAICS code and SIC code.

**SECTION 20. NR 438.04 (2) (e) is repealed.**

**SECTION 21. NR 438.04 (2) (f) is amended to read:**

**NR 438.04 (2)** (f) The name ~~and~~, telephone number, mailing address, and email address of the individual to be contacted regarding the ~~emission~~ emissions inventory ~~report~~.

**SECTION 22. NR 438.04 (2) (g) and (h) are repealed.**

**SECTION 23. NR 438.04 (3), (4) and (5) are repealed and recreated to read:**

**NR 438.04 (3)** EMISSIONS-GENERATING UNITS. For each emissions-generating unit, the emissions inventory shall include all of the following:

(a) Unit device identifier.

(b) Unit device type code.

(c) Design capacity, if applicable for the unit device type.

(d) For each emissions-generating process, all of the following:

1. Process identifier.

2. Process type code.

3. Source classification code, except for processes at tanks.

4. Throughput material type.

5. Annual throughput.

6. Maximum and average hourly throughput.

7. The normal operation schedule in hours per day, days per week, days per year, and percentages of quarterly activity.

8. The average and maximum sulfur content in percent by weight per fuel, if applicable for the throughput material type.

9. The average and maximum ash content in percent by weight per fuel, if applicable for the throughput material type.

10. For each emission factor, all of the following:

a. Pollutant.

b. Value or formula.

c. Units.

d. Origin.

11. Annual emissions by pollutant.

12. The fractions of emissions in percent that flow to connected controlling or discharging processes and the associated unit device and process identifiers.

13. Annual emissions measured by a continuous emissions monitor and pollutant, if applicable.

**(4)** EMISSIONS-CONTROLLING UNITS. For each emissions-controlling unit, the emissions inventory shall include all of the following:

(a) Unit device identifier.

(b) Unit device type code.

(c) For each controlling process, all of the following:

1. Process identifier.

2. Process type code.

3. The normal operation schedule in hours per day, days per week, days per year, and percentages of quarterly activity.

4. Control efficiencies by pollutant in percent.

5. The fractions of emissions in percent that flow to connected controlling or discharging processes and the associated unit device and process identifiers.

(d) For each emissions-generating process, all of the following:

1. Process identifier.

2. Process type code.

3. Source classification code.

4. Throughput material type.

5. Annual throughput.

6. Maximum and average hourly throughput.

7. The normal operation schedule in hours per day, days per week, days per year, and percentages of quarterly activity.

8. The average and maximum sulfur content in percent by weight per fuel, if applicable for the throughput material type.

9. The average and maximum ash content in percent by weight per fuel, if applicable for the throughput material type.

10. For each emission factor, all of the following:

a. Pollutant.

b. Value or formula.

c. Units.

d. Origin.

11. Annual emissions by pollutant.

12. The fractions of emissions that flow to connected controlling or discharging processes and the associated unit device and process identifiers.

13. Annual emissions measured by a continuous emissions monitor and pollutant, if applicable.

**(5)** EMISSIONS-DISCHARGING UNITS. For each stack, fugitive, or discharging unit, the emissions inventory shall include all of the following:

(a) Unit device identifier.

(b) Unit device type code.

(c) Discharge height.

(d) Stack inside top diameter, as applicable.

(e) Average exit temperature.

(f) Average exit velocity, as applicable.

(g) Fugitive release parameters, as applicable.

(h) For each discharging process, all of the following:

1. Process identifier.

2. Process type code.

3. The normal operation schedule in hours per day, days per week, days per year, and percentages of quarterly activity.

**SECTION 24. NR 438.04 (6) is repealed.**

**SECTION 25. NR 484.06 (4) Table 4D Row (a) is amended to read:**

**Table 4D**
**U.S. Environmental Protection Agency Document References**

| Document Number | Title | Incorporated by Reference For |
|---|---|---|
| (a) EPA, OAQPS, FIRE 6.23 | Factor Information Retrieval Data System, Version 6.23 | NR 437.04 (2) (a) 22.<br>~~NR 438.02 (2)~~<br>~~NR 438.03 (5) (a)~~ |

**SECTION 26. EFFECTIVE DATE.** This rule takes effect on the first day of the month following publication in the Wisconsin Administrative Register as provided in s. 227.22 (2) (intro.), Stats.

**SECTION 27. BOARD ADOPTION.** This rule was approved and adopted by the State of Wisconsin Natural Resources Board on January 26, 2022.

Dated at Madison, Wisconsin _____.

STATE OF WISCONSIN

DEPARTMENT OF NATURAL RESOURCES

BY _____

For Preston D. Cole, Secretary