

# IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY

## 58.01.01 - RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO

DOCKET NO. 58-0101-1201

### NOTICE OF RULEMAKING - PROPOSED RULE

**AUTHORITY:** In compliance with Section 67-5221(1), Idaho Code, notice is hereby given that this agency has initiated proposed rulemaking. The action is authorized by Sections 39-105 and 39-107, Idaho Code.

**PUBLIC HEARING SCHEDULE:** A public hearing concerning this proposed rule will be held as follows:

**Tuesday, July 10, 2012, 3:30 p.m.**

**Department of Environmental Quality  
Conference Room B  
1410 N. Hilton, Boise, Idaho**

The hearing site(s) will be accessible to persons with disabilities. Requests for accommodation must be made no later than five (5) days prior to the hearing. For arrangements, contact the undersigned at (208) 373-0418.

**DESCRIPTIVE SUMMARY:** The purpose of this rulemaking is to make various "housekeeping" revisions such as updates for consistency with federal regulations, clarification, and typographical corrections to certain air quality permitting rule sections, related definitions, and the toxic air pollutant sections.

Members of the regulated community who may be subject to Idaho's air quality rules as well as special interest groups, public officials, or members of the public who have an interest in the regulation of air emissions from sources in Idaho may be interested in commenting on this proposed rule. The proposed rule text is in legislative format. Language the agency proposes to add is underlined. Language the agency proposes to delete is struck out. It is these additions and deletions to which public comment should be addressed.

After consideration of public comments, DEQ intends to present the final proposal to the Board of Environmental Quality in October 2012 for adoption of a pending rule. The rule is expected to be final and effective upon adjournment of the 2013 legislative session if adopted by the Board and approved by the Legislature.

**INCORPORATION BY REFERENCE:** Pursuant to Section 67-5229(2)(a), Idaho Code, the following is a brief synopsis of why the incorporation by reference is necessary: Not applicable.

**NEGOTIATED RULEMAKING:** The text of the proposed rule has been drafted based on discussions held during negotiations conducted pursuant to Section 67-5220, Idaho Code, and IDAPA 58.01.23.810-815. On March 7, 2012, the Notice of Negotiated Rulemaking was published in the [Idaho Administrative Bulletin, Vol. 12-3, page 34](#), and a preliminary draft rule was made available for public review. A meeting was held on April 4, 2012. Members of the public participated in the negotiated rulemaking process by attending the meeting and by submitting written comments. The negotiated rulemaking record, which includes the negotiated rule drafts, written public comments received, documents distributed during the negotiated rulemaking process, and the negotiated rulemaking summary, is available at [www.deq.idaho.gov/58-0101-1201](http://www.deq.idaho.gov/58-0101-1201).

**IDAHO CODE 39-107D STATEMENT:** Section 585, Toxic Air Pollutants Non-Carcinogenic Increments, and Section 586, Toxic Air Pollutants Carcinogenic Increments, do regulate an activity not regulated by the federal government. The federal government does not regulate toxic air pollutants for the state of Idaho; therefore, the proposed rule revisions in Sections 585 and 586 are not broader in scope or more stringent than federal regulations. Notably, if a toxic air pollutant becomes subject to a federal regulation, that federal regulation applies in lieu of the state rules in accordance with Subsection 210.20. The remainder of the proposed rule does not regulate an activity not regulated by the federal government, nor is it broader in scope or more stringent than federal regulations.

**FISCAL IMPACT STATEMENT:** The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars (\$10,000) during the fiscal year when the pending rule will become effective: Not applicable.

**ASSISTANCE ON TECHNICAL QUESTIONS AND SUBMISSION OF WRITTEN COMMENTS:** For assistance on technical questions concerning this rulemaking, contact Martin Bauer at (208)373-0440, [martin.bauer@deq.idaho.gov](mailto:martin.bauer@deq.idaho.gov).

Anyone may submit written comments by mail, fax or e-mail at the address below regarding this proposed rule. DEQ will consider all written comments received by the undersigned on or before July 10, 2012.

DATED this 19th day of April, 2012.

Paula J. Wilson  
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**THE FOLLOWING IS THE TEXT OF THE PROPOSED RULE FOR DOCKET NO. 58-0101-1201**

**006. GENERAL DEFINITIONS.**

**01. Accountable.** Any SIP emission trading program must account for the aggregate effect of the emissions trades in the demonstration of reasonable further progress, attainment, or maintenance. (4-5-00)

**02. Act.** The Environmental Protection and Health Act of 1972 as amended (Sections 39-101 through 39-130, Idaho Code). (5-1-94)

**03. Actual Emissions.** The actual rate of emissions of a pollutant from an emissions unit as determined in accordance with the following: (4-5-00)

**a.** In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period. (4-5-00)

**b.** The Department may presume that the source-specific allowable emissions for the unit are equivalent to actual emissions of the unit. (4-5-00)

**c.** For any emissions unit (other than an electric utility steam generating unit as specified below) which has not yet begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date. (4-5-00)

**d.** For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the Department, on an annual basis for a period of five (5) years from the date the unit resumes regular operation, information demonstrating

that the physical or operational change did not result in an emissions increase. A longer period, not to exceed ten (10) years may be required by the Department if it determines such a period to be more representative of normal source post-change operations. (4-5-00)

**04. Adverse Impact on Visibility.** Visibility impairment which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the Federal Class I Area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairments, and how these factors correlate with: (3-30-07)

- a. Times of visitor use of the Federal Class I Area; and (3-30-07)
- b. The frequency and timing of natural conditions that reduce visibility. (3-30-07)
- c. This term does not include affects on integral vistas when applied to 40 CFR 51.307. (3-30-07)

**05. Air Pollutant/Air Contaminant.** Any substance, including but not limited to, dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon or particulate matter or any combination thereof. (4-5-00)

**06. Air Pollution.** The presence in the outdoor atmosphere of any air pollutant or combination thereof in such quantity of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property. (4-5-00)

**07. Air Quality.** The specific measurement in the ambient air of a particular air pollutant at any given time. (5-1-94)

**08. Air Quality Criterion.** The information used as guidelines for decisions when establishing air quality goals and air quality standards. (5-1-94)

**09. Allowable Emissions.** The allowable emissions rate of a stationary source or facility calculated using the maximum rated capacity of the source or facility (unless the source or facility is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following: (4-5-00)

- a. The applicable standards set forth in 40 CFR part 60 and 61; (4-5-00)
- b. Any applicable State Implementation Plan emissions limitation including those with a future compliance date; or (4-5-00)
- c. The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date. (4-5-00)

**10. Ambient Air.** That portion of the atmosphere, external to buildings, to which the general public has access. (5-1-94)

**11. Ambient Air Quality Violation.** Any ambient concentration that causes or contributes to an exceedance of a national ambient air quality standard as determined by 40 CFR Part 50. (4-11-06)

**12. Atmospheric Stagnation Advisory.** An air pollution alert declared by the Department when air pollutant impacts have been observed and/or meteorological conditions are conducive to additional air pollutant buildup. (4-11-06)

**13. Attainment Area.** Any area which is designated, pursuant to 42 U.S.C. Section 7407(d), as having ambient concentrations equal to or less than national primary or secondary ambient air quality standards for a particular air pollutant or air pollutants. (4-11-06)

**14. BART-Eligible Source.** Any of the following stationary sources of air pollutants, including any

reconstructed source, which was not in operation prior to August 7, 1962, and was in existence on August 7, 1977, and has the potential to emit two hundred fifty (250) tons per year or more of any air pollutant. In determining potential to emit, fugitive emissions, to the extent quantifiable, must be counted. (3-30-07)

- a. Fossil-fuel fired steam electric plants of more than two hundred fifty (250) million BTU's per hour heat input; (3-30-07)
- b. Coal cleaning plants (thermal dryers); (3-30-07)
- c. Kraft pulp mills; (3-30-07)
- d. Portland cement plants; (3-30-07)
- e. Primary zinc smelters; (3-30-07)
- f. Iron and steel mill plants; (3-30-07)
- g. Primary aluminum ore reduction plants; (3-30-07)
- h. Primary copper smelters; (3-30-07)
- i. Municipal incinerators capable of charging more than two hundred fifty (250) tons of refuse per day; (3-30-07)
- j. Hydrofluoric, sulfuric, and nitric acid plants; (3-30-07)
- k. Petroleum refineries; (3-30-07)
- l. Lime plants; (3-30-07)
- m. Phosphate rock processing plants; (3-30-07)
- n. Coke oven batteries; (3-30-07)
- o. Sulfur recovery plants; (3-30-07)
- p. Carbon black plants (furnace process); (3-30-07)
- q. Primary lead smelters; (3-30-07)
- r. Fuel conversion plants; (3-30-07)
- s. Sintering plants; (3-30-07)
- t. Secondary metal production facilities; (3-30-07)
- u. Chemical process plants; (3-30-07)
- v. Fossil-fuel boilers of more than two hundred fifty (250) million BTU's per hour heat input; (3-30-07)
- w. Petroleum storage and transfer facilities with a capacity exceeding three hundred thousand (300,000) barrels; (3-30-07)
- x. Taconite ore processing facilities; (3-30-07)
- y. Glass fiber processing plants; and (3-30-07)

- z.** Charcoal production facilities. (3-30-07)
- 15. Baseline (Area, Concentration, Date).** See Section 579. (5-1-94)
- 16. Best Available Retrofit Technology (BART).** Means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and non-air quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology. (3-30-07)
- 17. Board.** Idaho Board of Environmental Quality. (5-1-94)
- 18. Breakdown.** An unplanned failure of any equipment or emissions unit which may cause excess emissions. (4-5-00)
- 19. BTU.** British thermal unit. (5-1-94)
- 20. Clean Air Act.** The federal Clean Air Act, 42 U.S.C. Sections 7401 through 7671q. (5-1-94)
- 21. Collection Efficiency.** The overall performance of the air cleaning device in terms of ratio of materials collected to total input to the collector unless specific size fractions of the contaminant are stated or required. (5-1-94)
- 22. Commence Construction or Modification.** In general, this means initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities, other than preparatory activities, which mark the initiation of the change. (4-5-00)
- 23. Complete.** A determination made by the Department that all information needed to process a permit application has been submitted for review. (5-1-94)
- 24. Construction.** Fabrication, erection, installation, or modification of a stationary source or facility. (5-1-94)
- 25. Control Equipment.** Any method, process or equipment which removes, reduces or renders less noxious, air pollutants discharged into the atmosphere. (5-1-94)
- 26. Controlled Emission.** An emission which has been treated by control equipment to remove all or part of an air pollutant before release to the atmosphere. (5-1-94)
- 27. Criteria Air Pollutant.** Any of the following: PM-10; sulfur oxides; ozone, nitrogen dioxide; carbon monoxide; lead. (4-5-00)
- 28. Deciview.** A measurement of visibility impairment. A deciview is a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired. The deciview haze index is calculated based on the following equation (for the purposes of calculating deciview, the atmospheric light extinction coefficient must be calculated from aerosol measurements): Deciview Haze Index =  $10 \ln_e (b_{\text{ext}} / 10 \text{Mm}^{-1})$  where  $b_{\text{ext}}$  = the atmospheric light extinction coefficient, expressed in inverse megameters ( $\text{Mm}^{-1}$ ). (3-30-07)
- 29. Department.** The Department of Environmental Quality. (5-1-94)
- 30. Designated Facility.** Any of the following facilities: (5-1-94)

- a. Fossil-fuel fired steam electric plants of more than two hundred fifty (250) million BTU's per hour heat input; (5-1-94)
- b. Coal cleaning plants (thermal dryers); (5-1-94)
- c. Kraft pulp mills; (5-1-94)
- d. Portland cement plants; (5-1-94)
- e. Primary zinc smelters; (5-1-94)
- f. Iron and steel mill plants; (5-1-94)
- g. Primary aluminum ore reduction plants; (5-1-94)
- h. Primary copper smelters; (5-1-94)
- i. Municipal incinerators capable of charging more than two hundred and fifty (250) tons of refuse per day; (5-1-94)
- j. Hydrofluoric, sulfuric, and nitric acid plants; (5-1-94)
- k. Petroleum refineries; (5-1-94)
- l. Lime plants; (5-1-94)
- m. Phosphate rock processing plants; (5-1-94)
- n. Coke oven batteries; (5-1-94)
- o. Sulfur recovery plants; (5-1-94)
- p. Carbon black plants (furnace process); (5-1-94)
- q. Primary lead smelters; (5-1-94)
- r. Fuel conversion plants; (5-1-94)
- s. Sintering plants; (5-1-94)
- t. Secondary metal production facilities; (5-1-94)
- u. Chemical process plants; (5-1-94)
- v. Fossil-fuel boilers (or combination thereof) of more than two hundred and fifty (250) million BTU's per hour heat input; (5-1-94)
- w. Petroleum storage and transfer facilities with a capacity exceeding three hundred thousand (300,000) barrels; (5-1-94)
- x. Taconite ore processing facilities; (5-1-94)
- y. Glass fiber processing plants; and (5-1-94)
- z. Charcoal production facilities. (5-1-94)

31. **Director.** The Director of the Department of Environmental Quality or his designee. (5-1-94)
32. **Effective Dose Equivalent.** The sum of the products of absorbed dose and appropriate factors to account for differences in biological effectiveness due to the quality of radiation and its distribution in the body of reference man. The unit of the effective dose equivalent is the rem. It is generally calculated as an annual dose. (5-1-94)
33. **Emission.** Any controlled or uncontrolled release or discharge into the outdoor atmosphere of any air pollutants or combination thereof. Emission also includes any release or discharge of any air pollutant from a stack, vent, or other means into the outdoor atmosphere that originates from an emission unit. (5-1-94)
34. **Emission Standard.** A permit or regulatory requirement established by the Department or EPA which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction. (4-5-00)
35. **Emissions Unit.** An identifiable piece of process equipment or other part of a facility which emits or may emit any air pollutant. This definition does not alter or affect the term "unit" for the purposes of 42 U.S.C. Sections 7651 through 7651o. (5-1-94)
36. **EPA.** The United States Environmental Protection Agency and its Administrator or designee. (5-1-94)
37. **Environmental Remediation Source.** A stationary source that functions to remediate or recover any release, spill, leak, discharge or disposal of any petroleum product or petroleum substance, any hazardous waste or hazardous substance from any soil, ground water or surface water, and shall have an operational life no greater than five (5) years from the inception of any operations to the cessation of actual operations. Nothing in this definition shall be construed so as to actually limit remediation projects to five (5) years or less of total operation. (5-1-95)
38. **Excess Emissions.** Emissions that exceed an applicable emissions standard established for any facility, source or emissions unit by statute, regulation, rule, permit, or order. (4-11-06)
39. **Existing Stationary Source or Facility.** Any stationary source or facility that exists, is installed, or is under construction on the original effective date of any applicable provision of this chapter. (5-1-94)
40. **Facility.** All of the pollutant-emitting activities which belong to the same industrial grouping, are located on one (1) or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e. which have the same two-digit code) as described in the Standard Industrial Classification Manual. The fugitive emissions shall not be considered in determining whether a permit is required unless required by federal law. (4-11-06)
41. **Federal Class I Area.** Any federal land that is classified or reclassified "Class I." (3-30-07)
42. **Federal Land Manager.** The Secretary of the department with authority over the Federal Class I Area (or the Secretary's designee). (3-30-07)
43. **Federally Enforceable.** All limitations and conditions which are enforceable by EPA and the Department under the Clean Air Act, including those requirements developed pursuant to 40 CFR Parts 60 and 61 requirements within any applicable State Implementation Plan, and any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Parts 51, 52, 60, or 63. (3-30-07)
44. **Fire Hazard.** The presence or accumulation of combustible material of such nature and in sufficient quantity that its continued existence constitutes an imminent and substantial danger to life, property, public welfare or adjacent lands. (5-1-94)

- 45. Fuel-Burning Equipment.** Any furnace, boiler, apparatus, stack and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer. (5-1-94)
- 46. Fugitive Dust.** Fugitive emissions composed of particulate matter. (5-1-94)
- 47. Fugitive Emissions.** Those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. (5-1-94)
- 48. Garbage.** Any waste consisting of putrescible animal and vegetable materials resulting from the handling, preparation, cooking and consumption of food including, but not limited to, waste materials from households, markets, storage facilities, handling and sale of produce and other food products. (5-1-94)
- 49. Gasoline.** Any mixture of volatile hydrocarbons suitable as a fuel for the propulsion of motor vehicles or motor boats. Gasoline also means aircraft engine fuels when used for the operation or propulsion of motor vehicles or motor boats and includes gasohol, but does not include special fuels. (3-29-10)
- 50. Gasoline Cargo Tank.** Any tank or trailer used for the transport of gasoline from sources of supply to underground gasoline storage tanks. (3-29-10)
- 51. Gasoline Dispensing Facility (GDF).** Any facility with underground gasoline storage tanks used for dispensing gasoline. (3-29-10)
- 52. Grain Elevator.** Any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded. (5-1-94)
- 53. Grain Storage Elevator.** Any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean extraction plant which has a permanent grain storage capacity of thirty five thousand two hundred (35,200) cubic meters (ca. 1 million bushels). (5-1-94)
- 54. Grain Terminal Elevator.** Any grain elevator which has a permanent storage capacity of more than eighty-eight thousand one hundred (88,100) cubic meters (ca. 2.5 million bushels), except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots. (5-1-94)
- 55. Hazardous Air Pollutant (HAP).** Any air pollutant listed pursuant to Section 112(b) of the Clean Air Act. Hazardous Air Pollutants are regulated air pollutants. (4-11-06)
- 56. Hazardous Waste.** Any waste or combination of wastes of a solid, liquid, semisolid, or contained gaseous form which, because of its quantity, concentration or characteristics (physical, chemical or biological) may:
- a.** Cause or significantly contribute to an increase in deaths or an increase in serious, irreversible, or incapacitating reversible illnesses; or (5-1-94)
- b.** Pose a substantial threat to human health or to the environment if improperly treated, stored, disposed of, or managed. Such wastes include, but are not limited to, materials which are toxic, corrosive, ignitable, or reactive, or materials which may have mutagenic, teratogenic, or carcinogenic properties; provided that such wastes do not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are allowed under a national pollution discharge elimination system permit, or source, special nuclear, or by-product material as defined by 42 U.S.C. Sections 2014(e),(z) or (aa). (5-1-94)
- 57. Hot-Mix Asphalt Plant.** Those facilities conveying proportioned quantities or batch loading of cold aggregate to a drier, and heating, drying, screening, classifying, measuring and mixing the aggregate and asphalt for the purpose of paving, construction, industrial, residential or commercial use. (5-1-94)
- 58. Incinerator.** Any source consisting of a furnace and all appurtenances thereto designed for the



destruction of refuse by burning. "Open Burning" is not considered incineration. For purposes of these rules, the destruction of any combustible liquid or gaseous material by burning in a flare stack shall be considered incineration. (5-1-94)

**59. Indian Governing Body.** The governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government. (5-1-94)

**60. Integral Vista.** A view perceived from within the mandatory Class I Federal Area of a specific landmark or panorama located outside the boundary of the mandatory Class I Federal Area. (3-30-07)

**61. Kraft Pulping.** Any pulping process which uses, for a cooking liquor, an alkaline sulfide solution containing sodium hydroxide and sodium sulfide. (5-1-94)

**62. Least Impaired Days.** The average visibility impairment (measured in deciviews) for the twenty percent (20%) of monitored days in a calendar year with the lowest amount of visibility impairment. (3-30-07)

**63. Lowest Achievable Emission Rate (LAER).** For any source, the more stringent rate of emissions based on the following: (4-5-00)

**a.** The most stringent emissions limitation which is contained in any State Implementation Plan for such class or category of facility, unless the owner or operator of the proposed facility demonstrates that such limitations are not achievable; or (4-5-00)

**b.** The most stringent emissions limitation which is achieved in practice by such class or category of facilities. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the facility. In no event shall the application of the term permit a proposed new or modified facility to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance. (4-5-00)

**64. Mandatory Class I Federal Area.** Any area identified in 40 CFR 81.400 through 81.437. (3-30-07)

**65. Member of the Public.** For purposes of Subsection 006.103.a.xvi., a person located at any off-site point where there is a residence, school, business or office. (3-30-07)

**66. Mercury.** Total mercury including elemental mercury and mercury compounds. (4-7-11)

**67. Mercury Best Available Control Technology (MBACT).** An emission standard for mercury based on the maximum degree of reduction practically achievable as specified by the Department on an individual case-by-case basis taking into account energy, economic and environmental impacts, and other relevant impacts specific to the source. A Department approved MBACT shall be valid until the source subject to the MBACT is modified. If the proposed modification to the source subject to MBACT occurs within ten (10) years of the MBACT determination, a new MBACT review shall not be triggered as long as the source can meet the existing MBACT requirements. If the proposed modification occurs more than ten (10) years after the MBACT determination, then the proposed modification shall be subject to a new MBACT review. (4-7-11)

**68. Modification.** (4-11-06)

**a.** Any physical change in, or change in the method of operation of, a stationary source or facility which results in an emission increase as defined in Section 007 or which results in the emission of any regulated air pollutant not previously emitted. (4-11-06)

**b.** Any physical change in, or change in the method of operation of, a stationary source or facility which results in an increase in the emissions rate of any state only toxic air pollutant, or emissions of any state only toxic air pollutant not previously emitted. (4-11-06)

**c.** Fugitive emissions shall not be considered in determining whether a permit is required for a modification unless required by federal law. (4-11-06)

**d.** For purposes of this definition of modification, routine maintenance, repair and replacement shall not be considered physical changes and the following shall not be considered a change in the method of operation: (3-30-07)

i. An increase in the production rate if such increase does not exceed the operating design capacity of the affected stationary source, and if a more restrictive production rate is not specified in a permit; (5-1-94)

ii. An increase in hours of operation if more restrictive hours of operation are not specified in a permit; and (5-1-94)

iii. Use of an alternative fuel or raw material if the stationary source is specifically designed to accommodate such fuel or raw material before January 6, 1975 and use of such fuel or raw material is not specifically prohibited in a permit. (~~4-5-00~~) ( )

**69. Monitoring.** Sampling and analysis, in a continuous or noncontinuous sequence, using techniques which will adequately measure emission levels and/or ambient air concentrations of air pollutants. (5-1-94)

**70. Most Impaired Days.** The average visibility impairment (measured in deciviews) for the twenty percent (20%) of monitored days in a calendar year with the highest amount of visibility impairment. (3-30-07)

**71. Multiple Chamber Incinerator.** Any article, machine, equipment, contrivance, structure or part of a structure used to dispose of combustible refuse by burning, consisting of three (3) or more refractory lined combustion furnaces in series physically separated by refractory walls, interconnected by gas passage ports or ducts and employing adequate parameters necessary for maximum combustion of the material to be burned. (5-1-94)

**72. Natural Conditions.** Includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration. (3-30-07)

**73. New Stationary Source or Facility.** (5-1-94)

**a.** Any stationary source or facility, the construction or modification of which is commenced after the original effective date of any applicable provision of this chapter; or (5-1-94)

**b.** The restart of a nonoperating facility shall be considered a new stationary source or facility if: (5-1-94)

i. The restart involves a modification to the facility; or (5-1-94)

ii. After the facility has been in a nonoperating status for a period of two (2) years, and the Department receives an application for a Permit to Construct in the area affected by the existing nonoperating facility, the Department will, within five (5) working days of receipt of the application notify the nonoperating facility of receipt of the application for a Permit to Construct. Upon receipt of this Departmental notification, the nonoperating facility will comply with the following restart schedule or be considered a new stationary source or facility when it does restart: Within thirty (30) working days after receipt of the Department's notification of the application for a Permit to Construct, the nonoperating facility shall provide the Department with a schedule detailing the restart of the facility. The restart must begin within sixty (60) days of the date the Department receives the restart schedule. (5-1-94)

**74. Nonattainment Area.** Any area which is designated, pursuant to 42 U.S.C. Section 7407(d), as not meeting (or contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant. (5-1-94)

**75. Noncondensibles.** Gases and vapors from processes that are not condensed at standard temperature and pressure unless otherwise specified. (5-1-94)

- 76. Odor.** The sensation resulting from stimulation of the human sense of smell. (5-1-94)
- 77. Opacity.** A state which renders material partially or wholly impervious to rays of light and causes obstruction of an observer's view, expressed as percent. (5-1-94)
- 78. Open Burning.** The burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through a stack, duct or chimney. (5-1-94)
- 79. Operating Permit.** A permit issued by the Director pursuant to Sections 300 through 386 and/or 400 through 461. (4-5-00)
- 80. Particulate Matter.** Any material, except water in uncombined form, that exists as a liquid or a solid at standard conditions. (5-1-94)
- 81. Particulate Matter Emissions.** All particulate matter emitted to the ambient air as measured by an applicable reference method, or any equivalent or alternative method in accordance with Section 157. (4-5-00)
- 82. Permit to Construct.** A permit issued by the Director pursuant to Sections 200 through 228. (7-1-02)
- 83. Person.** Any individual, association, corporation, firm, partnership or any federal, state or local governmental entity. (5-1-94)
- 84. PM-10.** All particulate matter in the ambient air with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured by a reference method based on Appendix J of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53 or by an equivalent method designated in accordance with 40 CFR Part 53. (5-1-94)
- 85. PM-10 Emissions.** All particulate matter, including condensible particulates, with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method in accordance with Section 157. (4-5-00)
- 86. Potential to Emit/Potential Emissions.** The maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state or federally enforceable. Secondary emissions do not count in determining the potential to emit of a facility or stationary source. (3-30-07)
- 87. Portable Equipment.** Equipment which is designed to be dismantled and transported from one (1) job site to another job site. (5-1-94)
- 88. PPM (parts per million).** Parts of a gaseous contaminant per million parts of gas by volume. (5-1-94)
- 89. Prescribed Fire Management Burning.** The controlled application of fire to wildland fuels in either their natural or modified state under such conditions of weather, fuel moisture, soil moisture, etc., as will allow the fire to be confined to a predetermined area and at the same time produce the intensity of heat and rate of spread required to accomplish planned objectives, including: (5-1-94)
- a.** Fire hazard reduction; (5-1-94)
  - b.** The control of pests, insects, or diseases; (5-1-94)
  - c.** The promotion of range forage improvements; (5-1-94)

- d.** The perpetuation of natural ecosystems; (5-1-94)
- e.** The disposal of woody debris resulting from a logging operation, the clearing of rights of way, a land clearing operation, or a driftwood collection system; (5-1-94)
- f.** The preparation of planting and seeding sites for forest regeneration; and (5-1-94)
- g.** Other accepted natural resource management purposes. (5-1-94)
- 90. Primary Ambient Air Quality Standard.** That ambient air quality which, allowing an adequate margin of safety, is requisite to protect the public health. (5-1-94)
- 91. Process or Process Equipment.** Any equipment, device or contrivance for changing any materials whatever or for storage or handling of any materials, and all appurtenances thereto, including ducts, stack, etc., the use of which may cause any discharge of an air pollutant into the ambient air but not including that equipment specifically defined as fuel-burning equipment or refuse-burning equipment. (5-1-94)
- 92. Process Weight.** The total weight of all materials introduced into any source operation which may cause any emissions of particulate matter. Process weight includes solid fuels charged, but does not include liquid and gaseous fuels charged or combustion air. Water which occurs naturally in the feed material shall be considered part of the process weight. (5-1-94)
- 93. Process Weight Rate.** The rate established as follows: (5-1-94)
- a.** For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof; (4-5-00)
- b.** For cyclical or batch source operations, the total process weight for a period that covers a complete cycle of operation or an integral number of cycles, divided by the hours of actual process operation during such a period. Where the nature of any process or operation or the design of any equipment is such as to permit more than one (1) interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply. (4-5-00)
- 94. Quantifiable.** The Department must be able to determine the emissions impact of any SIP trading programs requirement(s) or emission limit(s). (4-5-00)
- 95. Radionuclide.** A type of atom which spontaneously undergoes radioactive decay. (5-1-94)
- 96. Regional Haze.** Visibility impairment that is caused by the emission of air pollutants from numerous sources located over a wide geographic area. Such sources include, but are not limited to, major and minor stationary sources, mobile sources, and area sources. (3-30-07)
- 97. Regulated Air Pollutant.** (4-11-06)
- a.** For purposes of determining applicability of major source permit to operate requirements, issuing, and modifying permits pursuant to Sections 300 through 397, and in accordance with Title V of the federal Clean Air Act amendments of 1990, 42 U.S.C. Section 7661 et seq., "regulated air pollutant" shall have the same meaning as in Title V of the federal Clean Air Act amendments of 1990, and any applicable federal regulations promulgated pursuant to Title V of the federal Clean Air Act amendments of 1990, 40 CFR Part 70; (4-11-06)
- b.** For purposes of determining applicability of any other operating permit requirements, issuing, and modifying permits pursuant to Sections 400 through 410, the federal definition of "regulated air pollutant" as defined in Subsection 006.94.a. shall also apply; (3-30-07)
- c.** For purposes of determining applicability of permit to construct requirements, issuing, and

modifying permits pursuant to Sections 200 through 228, except Section 214, and in accordance with Part D of Subchapter I of the federal Clean Air Act, 42 U.S.C. Section 7501 et seq., "regulated air pollutant" shall mean those air contaminants that are regulated in non-attainment areas pursuant to Part D of Subchapter I of the federal Clean Air Act and applicable federal regulations promulgated pursuant to Part D of Subchapter I of the federal Clean Air Act, 40 CFR 51.165; and (4-11-06)

**d.** For purposes of determining applicability of any other major or minor permit to construct requirements, issuing, and modifying permits pursuant to 200 through 228, except Section 214, "regulated air pollutant" shall mean those air contaminants that are regulated in attainment and unclassifiable areas pursuant to Part C of Subchapter I of the federal Clean Air Act, 40 CFR 52.21, and any applicable federal regulations promulgated pursuant to Part C of Subchapter I of the federal Clean Air Act, 42 U.S.C. Section 7470 et seq. (4-11-06)

**98. Replicable.** Any SIP procedures for applying emission trading shall be structured so that two (2) independent entities would obtain the same result when determining compliance with the emission trading provisions. (4-5-00)

**99. Responsible Official.** One (1) of the following: (5-1-94)

**a.** For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one (1) or more manufacturing, production, or operating facilities applying for or subject to a permit and either: (5-1-94)

**i.** The facilities employ more than two hundred fifty (250) persons or have gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000) (in second quarter 1980 dollars); or (4-5-00)

**ii.** The delegation of authority to such representative is approved in advance by the Department. (5-1-94)

**b.** For a partnership or sole proprietorship: a general partner or the proprietor, respectively. (5-1-94)

**c.** For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of Section 123, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA). (4-5-00)

**d.** For Phase II sources: (5-1-94)

**i.** The designated representative in so far as actions, standards, requirements, or prohibitions under 42 U.S.C. Sections 7651 through 7651o or the regulations promulgated thereunder are concerned; and (5-1-94)

**ii.** The designated representative for any other purposes under 40 CFR Part 70. (5-1-94)

**100. Safety Measure.** Any shutdown (and related startup) or bypass of equipment or processes undertaken to prevent imminent injury or death or severe damage to equipment or property which may cause excess emissions. (4-5-00)

**101. Salvage Operation.** Any source consisting of any business, trade or industry engaged in whole or in part in salvaging or reclaiming any product or material, such as, but not limited to, reprocessing of used motor oils, metals, chemicals, shipping containers, or drums, and specifically including automobile graveyards and junkyards. (5-1-94)

**102. Scheduled Maintenance.** Planned upkeep, repair activities and preventative maintenance on any air pollution control equipment or emissions unit, including process equipment, and including shutdown and startup of such equipment. (3-20-97)

**103. Secondary Ambient Air Quality Standard.** That ambient air quality which is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of air pollutants in the ambient air. (5-1-94)

**104. Secondary Emissions.** Emissions which would occur as a result of the construction, modification, or operation of a stationary source or facility, but do not come from the stationary source or facility itself. Secondary emissions must be specific, well defined, quantifiable, and affect the same general area as the stationary source, facility, or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the primary stationary source, facility or modification. Secondary emissions do not include any emissions which come directly from a mobile source regulated under 42 U.S.C. Sections 7521 through 7590. (3-30-07)

**105. Shutdown.** The normal and customary time period required to cease operations of air pollution control equipment or an emissions unit beginning with the initiation of procedures to terminate normal operation and continuing until the termination is completed. (5-1-94)

**106. Significant.** In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following: (4-11-06)

- a. Pollutant and emissions rate: (4-11-06)
  - i. Carbon monoxide, one hundred (100) tons per year; (5-1-94)
  - ii. Nitrogen oxides, forty (40) tons per year; (5-1-94)
  - iii. Sulfur dioxide, forty (40) tons per year; (5-1-94)
  - iv. Particulate matter; ( )
  - (1) Twenty-five (25) tons per year of particulate matter emissions; ( )
  - (2) Fifteen (15) tons per year of PM<sub>10</sub> emissions; or (4-11-06)( )
  - (3) Ten (10) tons per year of direct PM<sub>2.5</sub> emissions; forty (40) tons per year of sulfur dioxide emissions; forty (40) tons per year of nitrogen oxide emissions; ( )
  - v. Ozone, forty (40) tons per year of volatile organic compounds; (4-11-06)
  - vi. Lead, six-tenths (0.6) of a ton per year; (5-1-94)
  - vii. Fluorides, three (3) tons per year; (5-1-94)
  - viii. Sulfuric acid mist, seven (7) tons per year; (5-1-94)
  - ix. Hydrogen sulfide (H<sub>2</sub>S), ten (10) tons per year; (5-1-94)
  - x. Total reduced sulfur (including H<sub>2</sub>S), ten (10) tons per year; (5-1-94)
  - xi. Reduced sulfur compounds (including H<sub>2</sub>S), ten (10) tons per year; (5-1-94)
  - xii. Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans), thirty-five ten-millionths (0.0000035) tons per year; (5-1-94)
  - xiii. Municipal waste combustor metals (measured as particulate matter), fifteen (15) tons per year; (5-1-94)

xiv. Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride), forty (40) tons per year; (5-1-94)

xv. Municipal solid waste landfill emissions (measured as nonmethane organic compounds), fifty (50) tons per year; or (4-11-06)

xvi. Radionuclides, a quantity of emissions, from source categories regulated by 40 CFR Part 61, Subpart H, that have been determined in accordance with 40 CFR Part 61, Appendix D and by Department approved methods, that would cause any member of the public to receive an annual effective dose equivalent of at least one tenth (0.1) mrem per year, if total facility-wide emissions contribute an effective dose equivalent of less than three (3) mrem per year; or any radionuclide emission rate, if total facility-wide radionuclide emissions contribute an effective dose equivalent of greater than or equal to three (3) mrem per year. (5-1-95)

b. In reference to a net emissions increase or the potential of a source or facility to emit a regulated air pollutant not listed in Subsection 006.103.a. above and not a toxic air pollutant, any emission rate; or (3-30-07)

c. For a major facility or major modification which would be constructed within ten (10) kilometers of a Class I area, the emissions rate which would increase the ambient concentration of an emitted regulated air pollutant in the Class I area by one (1) microgram per cubic meter, twenty-four (24) hour average, or more. (4-5-00)

**107. Significant Contribution.** Any increase in ambient concentrations which would exceed the following: (5-1-94)

a. Sulfur dioxide: (5-1-94)

i. One (1.0) microgram per cubic meter, annual average; (5-1-94)

ii. Five (5) micrograms per cubic meter, twenty-four (24) hour average; (5-1-94)

iii. Twenty-five (25) micrograms per cubic meter, three (3) hour average; (5-1-94)

b. Nitrogen dioxide, one (1.0) microgram per cubic meter, annual average; (5-1-94)

c. Carbon monoxide: (5-1-94)

i. One-half (0.5) milligrams per cubic meter, eight (8) hour average; (5-1-94)

ii. Two (2) milligrams per cubic meter, one (1) hour average; (5-1-94)

d. PM-10: (5-1-94)

i. One (1.0) microgram per cubic meter, annual average; (5-1-94)

ii. Five (5.0) micrograms per cubic meter, twenty-four (24) hour average; ~~(5-1-94)~~ ( )

e. PM-2.5: ( )

i. Three-tenths (0.3) microgram per cubic meter, annual average; ( )

ii. One point two (1.2) micrograms per cubic meter, twenty-four (24) hour average. ( )

**108. Small Fire.** A fire in which the material to be burned is not more than four (4) feet in diameter nor more than three (3) feet high. (5-1-94)

**109. Smoke.** Small gas-borne particles resulting from incomplete combustion, consisting predominantly, but not exclusively, of carbon and other combustible material. (5-1-94)

- 110. Smoke Management Plan.** A document issued by the Director to implement Sections 606 through 616, Categories of Allowable Burning. (5-1-94)
- 111. Smoke Management Program.** A program whereby meteorological information, fuel conditions, fire behavior, smoke movement and atmospheric dispersal conditions are used as a basis for scheduling the location, amount and timing of open burning operations so as to minimize the impact of such burning on identified smoke sensitive areas. (5-1-94)
- 112. Source.** A stationary source. (5-1-94)
- 113. Source Operation.** The last operation preceding the emission of air pollutants, when this operation:
- a.** Results in the separation of the air pollutants from the process materials or in the conversion of the process materials into air pollutants, as in the case of fuel combustion; and (5-1-94)
  - b.** Is not an air cleaning device. (5-1-94)
- 114. Special Fuels.** All fuel suitable as fuel for diesel engines; a compressed or liquefied gas obtained as a by-product in petroleum refining or natural gasoline manufacture, such as butane, isobutane, propane, propylene, butylenes, and their mixtures; and natural gas, either liquid or gas, and hydrogen, used for the generation of power for the operation or propulsion of motor vehicles. (3-29-10)
- 115. Stack.** Any point in a source arranged to conduct emissions to the ambient air, including a chimney, flue, conduit, or duct but not including flares. (5-1-94)
- 116. Stage 1 Vapor Collection.** Used during the refueling of underground gasoline storage tanks to reduce hydrocarbon emissions. Vapors in the tank, which are displaced by the incoming gasoline, are routed through a hose into the gasoline cargo tank and returned to the terminal for processing. Two (2) types of Stage 1 systems exist: coaxial and dual point. (3-29-10)
- a.** Coaxial System. A Stage 1 vapor collection system that requires only one (1) tank opening. The tank opening is usually four (4) inches in diameter with a three (3) inch diameter product fill tube inserted into the opening. Fuel flows through the inner tube while vapors are displaced through the annular space between the inner and outer tubes. (3-29-10)
  - b.** Dual Point System. A Stage 1 vapor collection system that consists of two (2) separate tank openings, one (1) for delivery of the product and the other for the recovery of vapors. (3-29-10)
- 117. Standard Conditions.** Except as specified in Subsection 576.02 for ambient air quality standards, a dry gas temperature of twenty degrees Celsius (20C) sixty-eight degrees Fahrenheit (68F) and a gas pressure of seven hundred sixty (760) millimeters of mercury (14.7 pounds per square inch) absolute. (4-5-00)
- 118. Startup.** The normal and customary time period required to bring air pollution control equipment or an emissions unit, including process equipment, from a nonoperational status into normal operation. (5-1-94)
- 119. Stationary Source.** Any building, structure, facility, emissions unit, or installation which emits or may emit any air pollutant. The fugitive emissions shall not be considered in determining whether a permit is required unless required by federal law. (4-11-06)
- 120. Tier I Source.** Any of the following: (5-1-94)
- a.** Any source located at any major facility as defined in Section 008; (4-5-00)
  - b.** Any source, including an area source, subject to a standard, limitation, or other requirement under 42 U.S.C. Section 7411 or 40 CFR Part 60, and required by EPA to obtain a Part 70 permit; (4-11-06)



- c.** Any source, including an area source, subject to a standard or other requirement under 42 U.S.C. Section 7412, 40 CFR Part 61 or 40 CFR Part 63, and required by EPA to obtain a Part 70 permit, except that a source is not required to obtain a permit solely because it is subject to requirements under 42 U.S.C. Section 7412(r); (4-11-06)
- d.** Any Phase II source; and (5-1-94)
- e.** Any source in a source category designated by the Department. (5-1-94)
- 121. Total Suspended Particulates.** Particulate matter as measured by the method described in 40 CFR 50 Appendix B. (4-5-00)
- 122. Toxic Air Pollutant.** An air pollutant that has been determined by the Department to be by its nature, toxic to human or animal life or vegetation and listed in Section 585 or 586. (5-1-94)
- 123. Toxic Air Pollutant Carcinogenic Increments.** Those ambient air quality increments based on the probability of developing excess cancers over a seventy (70) year lifetime exposure to one (1) microgram per cubic meter (1 ug/m<sup>3</sup>) of a given carcinogen and expressed in terms of a screening emission level or an acceptable ambient concentration for a carcinogenic toxic air pollutant. They are listed in Section 586. (5-1-94)
- 124. Toxic Air Pollutant Non-carcinogenic Increments.** Those ambient air quality increments based on occupational exposure limits for airborne toxic chemicals expressed in terms of a screening emission level or an acceptable ambient concentration for a non-carcinogenic toxic air pollutant. They are listed in Section 585. (5-1-94)
- 125. Toxic Substance.** Any air pollutant that is determined by the Department to be by its nature, toxic to human or animal life or vegetation. (5-1-94)
- 126. Trade Waste.** Any solid, liquid or gaseous material resulting from the construction or demolition of any structure, or the operation of any business, trade or industry including, but not limited to, wood product industry waste such as sawdust, bark, peelings, chips, shavings and cull wood. (5-1-94)
- 127. TRS (Total Reduced Sulfur).** Hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide and any other organic sulfide present. (5-1-94)
- 128. Unclassifiable Area.** An area which, because of a lack of adequate data, is unable to be classified pursuant to 42 U.S.C. Section 7407(d) as either an attainment or a nonattainment area. (5-1-94)
- 129. Uncontrolled Emission.** An emission which has not been treated by control equipment. (5-1-94)
- 130. Upset.** An unplanned disruption in the normal operations of any equipment or emissions unit which may cause excess emissions. (4-5-00)
- 131. Visibility Impairment.** Any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions. (3-30-07)
- 132. Visibility in Any Mandatory Class I Federal Area.** Includes any integral vista associated with that area. (3-30-07)
- 133. Wigwam Burner.** Wood waste burning devices commonly called teepee burners, silos, truncated cones, and other such burners commonly used by the wood product industry for the disposal by burning of wood wastes. (5-1-94)
- 134. Wood Stove Curtailment Advisory.** An air pollution alert issued through local authorities and/or the Department to limit wood stove emissions during air pollution episodes. (5-1-94)

**(BREAK IN CONTINUITY OF SECTIONS)**

**220. GENERAL EXEMPTION CRITERIA FOR PERMIT TO CONSTRUCT EXEMPTIONS.**

**01. General Exemption Criteria.** Sections 220 through 223 may be used by owners or operators to exempt certain sources from the requirement to obtain a permit to construct. Nothing in these sections shall preclude an owner or operator from choosing to obtain a permit to construct. For purposes of Sections 220 through 223, the term source means the equipment or activity being exempted. For purposes of Sections 220 through 223, fugitive emissions shall not be considered in determining whether a source meets the applicable exemption criteria unless required by federal law. No permit to construct is required for a source that satisfies all of the following criteria, in addition to the criteria set forth at Sections 221, ~~and 223 or 222, or~~ and 223 (as required): ~~(4-11-06)( )~~

**a.** The maximum capacity of a source to emit an air pollutant under its physical and operational design without consideration of limitations on emission such as air pollution control equipment, restrictions on hours of operation and restrictions on the type and amount of material combusted, stored or processed would not: (4-5-00)

i. Equal or exceed one hundred (100) tons per year of any regulated air pollutant. (4-5-00)

ii. Cause an increase in the emissions of a major facility that equals or exceeds the significant emissions rates set out in the definition of significant at Section 006. (4-5-00)

**b.** Combination. The source is not part of a proposed new major facility or part of a proposed major modification. (4-5-00)

**02. Record Retention.** Unless the source is subject to and the owner or operator complies with Section 385, the owner or operator of the source, except for those sources listed in Subsections 222.02.a. through 222.02.g., shall maintain documentation on site which shall identify the exemption determined to apply to the source and verify that the source qualifies for the identified exemption. The records and documentation shall be kept for a period of time not less than five (5) years from the date the exemption determination has been made or for the life of the source for which the exemption has been determined to apply, which ever is greater, or until such time as a permit to construct or an operating permit is issued which covers the operation of the source. The owner or operator shall submit the documentation to the Department upon request. (4-5-00)

**(BREAK IN CONTINUITY OF SECTIONS)**

**222. CATEGORY II EXEMPTION.**

No permit to construct is required for the following sources. (4-5-00)

**01. Exempt Source.** A source that satisfies the criteria set forth in Section 220 and that is specified below: (4-5-00)

**a.** Laboratory equipment used exclusively for chemical and physical analyses, research or education, including, but not limited to, ventilating and exhaust systems for laboratory hoods. To qualify for this exemption, the source shall: (5-1-94)

i. Comply with Section 223. (4-5-00)

ii. Have potential emissions that are less than one percent (1%) of the applicable radionuclides standard in 40 CFR Part 61, Subpart H. (4-5-00)

**b.** Environmental characterization activities including emplacement and operation of field instruments, drilling of sampling and monitoring wells, sampling activities, and environmental characterization activities. (4-5-00)

**c.** Stationary internal combustion engines of less than or equal to six hundred (600) horsepower and

which are fueled by natural gas, propane gas, liquefied petroleum gas, distillate fuel oils, residual fuel oils, and diesel fuel; waste oil, gasoline, or refined gasoline shall not be used. To qualify for this exemption, the source must be operated in accordance with the following: (5-1-94)

- i. One hundred (100) horsepower or less -- unlimited hours of operation. (5-1-94)
- ii. One hundred one (101) to two hundred (200) horsepower -- less than four hundred fifty (450) hours per month. (5-1-94)
- iii. Two hundred one (201) to four hundred (400) horsepower -- less than two hundred twenty-five (225) hours per month. (5-1-94)
- iv. Four hundred one (401) to six hundred (600) horsepower -- less than one hundred fifty (150) hours per month. (5-1-94)
- d.** Stationary internal combustion engines used exclusively for emergency purposes which are operated less than five hundred (500) hours per year and are fueled by natural gas, propane gas, liquefied petroleum gas, distillate fuel oils, residual fuel oils, and diesel fuel; waste oil, gasoline, or refined gasoline shall not be used. (4-11-06)

**e.** A pilot plant that uses a slip stream from an existing process stream not to exceed ten percent (10%) of that existing process stream ~~or~~ **and** which satisfies the following: (4-5-00) ( )

- i. The source shall comply with Section 223. For carcinogen emissions, the owner or operator may utilize a short term adjustment factor of ten (10) by multiplying either the acceptable ambient concentration or the screening emissions level, but not both, by ten (10). (4-5-00)
- ii. The source shall have uncontrolled potential emissions that are less than one percent (1%) of the applicable radionuclides standard in 40 CFR Part 61, Subpart H. (4-5-00)
- iii. The exemption for a pilot plant shall terminate one (1) year after the commencement of operations and shall not be renewed. (4-5-00)

**02. Other Exempt Sources.** A source that satisfies the criteria set forth in Section 220 and that is specified below: (4-5-00)

- a.** Air conditioning or ventilating equipment not designed to remove air pollutants generated by or released from equipment. (5-1-94)
- b.** Air pollutant detectors or recorders, combustion controllers, or combustion shutoffs. (5-1-94)
- c.** Fuel burning equipment for indirect heating and for heating and reheating furnaces using natural gas, propane gas, liquefied petroleum gas, or biogas (gas produced by the anaerobic decomposition of organic material through a controlled process) with hydrogen sulfide concentrations less than two hundred (200) ppmv exclusively with a capacity of less than fifty (50) million btu's per hour input. (4-11-06)
- d.** Other fuel burning equipment for indirect heating with a capacity of less than one million (1,000,000) btu's per hour input. (5-1-94)
- e.** Mobile internal combustion engines, marine installations and locomotives. (5-1-94)
- f.** Agricultural activities and services. (5-1-94)
- g.** Retail gasoline, natural gas, propane gas, liquefied petroleum gas, distillate fuel oils and diesel fuel sales. (5-1-94)
- h.** Used Oil Fired Space Heaters which comply with all the following requirements: (7-1-97)

i. The used oil fired space heater burns only used oil that the owner or operator generates on site, that is derived from households, such as used oil generated by individuals maintaining their personal vehicles, or on-specification used oil that is derived from commercial generators provided that the generator, transporter and owner or operator burning the oil for energy recovery comply fully with IDAPA 58.01.05.015, "Rules and Standards for Hazardous Waste"; (7-1-97)

(1) For the purposes of Subsection 222.02.h., "used oil" refers to any oil that has been refined from crude oil or any synthetic oil that has been used and, as a result of such use, is contaminated by physical or chemical impurities. (4-5-00)

(2) For the purposes of Subsection 222.02.h., "used oil fired space heater" refers to any furnace or apparatus and all appurtenances thereto, designed, constructed and used for combusting used oil for energy recovery to directly heat an enclosed space. (4-5-00)

ii. Any used oil burned is not contaminated by added toxic substances such as solvents, antifreeze or other household and industrial chemicals; (7-1-97)

iii. The used oil fired space heater is designed to have a maximum capacity of not more than one half (0.5) million BTU per hour; (4-5-00)

iv. The combustion gases from the used oil fired space heater are vented to the ambient air through a stack equivalent to the type and design specified by the manufacturer of the heater and installed to minimize down wash and maximize dispersion; and (7-1-97)

v. The used oil fired space heater is of modern commercial design and manufacture, except that a homemade used oil fired space heater may be used if, prior to the operation of the homemade unit, the owner or operator submits documentation to the Department demonstrating, to the satisfaction of the Department, that emissions from the homemade unit are no greater than those from modern commercially available units. (7-1-97)

i. Multiple chamber crematory retorts used to cremate human or animal remains using natural gas exclusively with a maximum average charge capacity of two hundred (200) pounds of remains per hour and a minimum secondary combustion chamber temperature of one thousand five hundred (1500) degrees Fahrenheit while operating. (4-11-06)

j. Petroleum environmental remediation source by vapor extraction with an operation life not to exceed five (5) years (except for landfills). The short-term adjustment factor in Subsection 210.15 cannot be used if the remediation is within five hundred (500) feet of a sensitive receptor. Forms are available at the DEQ website at <http://www.deq.idaho.gov>, to help assist sources in this exemption determination. (4-11-06)

k. Dry cleaning facilities that are not major under, but subject to, 40 CFR Part 63, Subpart M. (4-11-06)

**223. EXEMPTION CRITERIA AND REPORTING REQUIREMENTS FOR TOXIC AIR POLLUTANT EMISSIONS.**

No permit to construct for toxic air pollutants is required for a source that satisfies any of the exemption criteria below, the recordkeeping requirements at Subsection 220.02, and reporting requirements as follows: (4-5-00)

**01. Below Regulatory Concern (BRC) Exemption.** The source qualifies for a BRC exemption if the uncontrolled emission rate (refer to Section 210) for all toxic air pollutants emitted by the source is less than or equal to ten percent (10%) of all applicable screening emission levels listed in Sections 585 and 586. (4-5-00)

**02. Level I Exemption.** To obtain a Level I exemption, the source shall satisfy the following criteria: (4-5-00)

a. The uncontrolled emission rate (refer to Section 210) for all toxic air pollutants shall be less than or equal to all applicable screening emission levels listed in Sections 585 and 586; or (4-5-00)

b. The uncontrolled ambient concentration (refer to Section 210) for all toxic air pollutants at the point of compliance shall be less than or equal to all applicable acceptable ambient concentrations listed in Sections 585 and 586. (4-5-00)

**03. Level II Exemption.** To obtain a Level II exemption, the source shall satisfy the following criteria: (4-5-00)

a. The uncontrolled ambient concentration at the point of compliance (refer to Section 210) for all toxic air pollutants emitted by the source shall be less than or equal to all applicable acceptable ambient concentrations listed in Sections 585 and 586; and (4-5-00)

b. If the owner or operator installs and operates control equipment that is not otherwise required to qualify for an exemption and the controlled emission rate (refer to Section 210) of the source for all toxic air pollutants is less than or equal to ten percent (10%) of all applicable screening emission levels listed in Sections 585 and 586. (4-5-00)

**04. Level III Exemption.** To obtain a Level III exemption, the source shall satisfy the following criteria: (4-5-00)

a. The uncontrolled ambient concentration at the point of compliance (refer to Section 210) for all toxic air pollutants emitted by the source shall be less than or equal to all applicable acceptable ambient concentrations listed in Sections 585 and 586; and (4-5-00)

b. The controlled emission rate (refer to Section 210) for all toxic air pollutants emitted by the source shall be less than or equal to all applicable screening emission levels listed in Sections 585 and 586. (4-5-00)

**05. Annual Report for Toxic Air Pollutant Exemption.** Commencing on May 1, 1996, and annually thereafter, the owner or operator of a source claiming a Level I, II, or III exemption shall submit a certified report for the previous calendar year to the Department for each Level I, II, or III exemption determination. The owner or operator is not required to annually submit a certified report for a Level I, II, or III exemption determination previously claimed and reported. The report shall be labeled "Toxic Air Pollutant Exemption Report" and shall state the date construction has or will commence and shall include copies of all exemption determinations completed by the owner or operator for each Level I, II, and III exemption. (4-5-00)( )

**(BREAK IN CONTINUITY OF SECTIONS)**

**585. TOXIC AIR POLLUTANTS NON-CARCINOGENIC INCREMENTS.**

The screening emissions levels (EL) and acceptable ambient concentrations (AAC) for non-carcinogens are as provided in the following table. The AAC in this section are twenty-four (24) hour averages. (6-30-95)

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
60-35-5	Acetamide (NY)	--	0.002	0.0003
64-19-7	Acetic acid	25	1.67	1.25
108-24-7	Acetic anhydride	20	1.33	1
67-64-1	Acetone	1780	119	89
75-05-8	Acetonitrile	67	4.47	3.35

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
540-59-0	Acetylene dichloride, See 1,2-Dichloroethylene			
79-27-6	Acetylene tetrabromide	15	1	.75
107-02-8	Acrolein	0.25	0.017	0.0125
79-10-7	Acrylic acid	30	2	1.5
107-18-6	Allyl alcohol	5	0.333	.25
106-92-3	Allyl glycidyl ether	22	1.47	1.1
2179-59-1	Allyl propyl disulfide	12	0.8	0.6
7429-90-5	Aluminum Including:			
NA	Metal & Oxide	10	0.667	0.5
NA	Pyro powders	5	0.333	0.25
NA	Soluble salts	2	0.133	0.10
NA	Alkyls not otherwise classified	2	0.133	0.10
141-43-5	2-Aminoethanol, See Ethanolamine			
504-29-0	2-Aminopyridine	2	0.133	0.10
7664-41-7	Ammonia	18	1.2	0.9
12125-02-9	Ammonium chloride fume	10	0.667	0.5
3825-26-1	Ammonium perfluorooctanoate	0.1	0.007	0.05
7773-06-0	Ammonium sulfamate	10	0.667	0.5
628-63-7	n-Amyl acetate	530	35.3	26.5
626-38-0	Sec-Amyl acetate	665	44.3	33.25
7440-36-0	Antimony & compounds, as Sb (handling & use)	0.5	0.033	0.025
86-88-4	ANTU	0.3	0.02	0.015
7784-42-1	Arsine	0.2	0.013	0.01
86-50-0	Azinphos-methyl	0.2	0.013	0.01
7440-39-3	Barium, soluble compounds, as Ba	0.5	0.033	0.025
17804-35-2	Benomyl	10	0.67	0.5
7106-51-4	p-Benzoquinone, See Quinone			
94-36-0	Benzoyl peroxide	5	0.333	0.25
92-52-4	Biphenyl	1.5	0.1	0.075
1304-82-1	Bismuth telluride undoped	10	0.667	0.05
NA	Bismuth telluride if selenium doped	5	0.333	0.25
1303-96-4	Borates, tetra odium salts - Including:			
NA	Anhydrous	1	0.067	0.05
NA	Decahydrate	5	0.333	0.25

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
NA	Pentahydrate	1	0.067	0.05
1303-86-2	Boron oxide	10	0.667	0.5
10294-33-4	Boron tribromide	10	0.667	0.5
7637-07-2	Boron trifluoride	3	0.2	0.25
314-40-9	Bromacil	10	0.667	0.5
7726-95-6	Bromine	0.7	0.047	0.035
7789-30-2	Bromine penta-fluoride	0.7	0.047	0.035
75-25-2	Bromoform	5	0.333	0.25
109-79-5	Butanethiol, see Butyl mercaptan			
78-93-3	2-Butanone, see Methyl ethyl ketone			
112- <del>80</del> 7-2	2-butoxyethyl acetate	---	8.33	1.25
111-76-2	2-Butoxyethanol (EGBG)	120	8	6
123-86-4	n-Butyl acetate	710	47.3	35.5
105-46-4	sec-Butyl acetate	950	63.3	47.5
540-88-5	tert-Butyl acetate	950	63.3	47.5
141-32-2	Butyl acrylate	55	3.67	2.75
71-36-3	n-Butyl alcohol	150	10	7.5
78-92-2	Sec-Butyl alcohol	305	20.3	15.25
75-65-0	tert-Butyl alcohol	300	20	15
109-73-9	Butylamine	15	1	.75
124-17-4	Butyl carbitol acetate (ID)	---	0.846	.625
1189-85-1	tert-Butyl chromate, as CrO3	0.1	0.007	.005
2426-08-6	n-Butyl glycidyl ether	135	9	6.75
138-22-7	n-Butyl lactate	25	1.67	1.25
109-79-5	Butyl mercaptan	1.8	0.12	0.09
89-72-5	o-sec-Butylphenol	30	2	1.5
98-51-1	p-tert-Butyltoluene	60	4	3
<del>13765-19-0</del> <del>1317-65-3</del>	Calcium carbonate	10	0.667	0.5
156-62-7	Calcium cyanamide	0.5	0.033	0.025
1305-62-0	Calcium hydroxide	5	0.333	0.25
1305-78-8	Calcium oxide	2	0.133	0.1
1344-95-2	Calcium silicate (synthetic)	10	0.667	0.5
13397-24-5	Calcium sulfate	10	0.667	0.5

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
76-22-2	Camphor, synthetic	12	0.8	0.6
105-60-2	Caprolactam - Including: Dust Vapor	1 20	0.067 1.33	0.05 1.0
1333-86-4	Carbon black	3.5	0.23	0.175
2425-06-1	Captafol	0.1	0.007	0.005
133-06-2	Captan	5	0.333	0.25
463-58-1	Carbonyl sulfide	0.4	0.027	0.02
63-25-2	Carbaryl	5	0.333	0.25
1563-66-2	Carbofuran	0.1	0.007	0.005
75-15-0	Carbon disulfide	30	2	1.5
558-13-4	Carbon tetrabromide	1.4	0.093	0.07
75-44-5	Carbonyl chloride, See Phosgene			
353-50-4	Carbonyl fluoride	5	0.333	0.25
120-80-9	Catechol	20	1.33	1.0
21351-79-1	Cesium hydroxide	2	0.133	0.10
133-90-4	Chloramben (PL)	---	887	133
8001-35-2	Chlorinated camphene	0.5	0.0333	0.025
31242-93-0	Chlorinated diphenyl oxide	0.5	0.033	0.025
7782-50-5	Chlorine	3	0.2	0.15
10049-04-4	Chlorine dioxide	0.3	0.02	0.015
7790-91-2	Chlorine trifluoride (CL)	0.38	0.025	0.002
107-20-0	Chloroacetaldehyde	0.32	0.021	0.015
78-95-5	Chloroacetone	0.38	0.0253	0.019
532-27-4	a-Chloroacetophenone	0.32	0.021	0.016
79-04-9	Chloroacetyl chloride	0.2	0.013	0.01
108-90-7	Chlorobenzene	350	23.3	17.5
510-15-6	Chlorobenzilate (PL1)	---	0.047	0.035
2698-41-1	O-Chlorobenzylidene malonitrile (CL)	0.4	0.0027	0.03
126-99-8	2-Chloro-1,3-butadiene, see B-Chloroprene			
107-07-3	2-Chloroethanol, see Ethylene chlorohydrin			
600-25-9	1-Chloro-1-nitro propane	10	0.667	0.5
95-57-8	2-Chlorophenol (and all isomers) (ID)	---	0.033	0.025
76-06-2	Chloropicrin	0.7	0.047	0.037



CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
126-99-8	B-chloroprene	36	2.4	1.8
2039-87-4	o-Chlorostyrene	285	19	14.25
95-49-8	o-Chlorotoluene	250	16.7	12.5
1929-82-4	2-Chloro-6-(tri-chloromethyl) pyridine, see Nitrapyrin			
2921-88-2	Chlorpyrifos	0.2	0.013	0.01
7440-47-3	Chromium metal - Including:	0.5	0.033	0.025
7440-47-3	Chromium (II) compounds, as Cr	0.5	0.033	0.025
<del>7440-47-3</del> <del>16065-83-1</del>	Chromium (III) compounds, as Cr	0.5	0.033	0.025
2971-90-6	Clopidol	10	0.667	0.5
NA	Coal dust (<5% silica)	2	0.133	0.1
10210-68-1	Cobalt carbonyl as Co	0.1	0.007	0.005
16842-03-8	Cobalt hydrocarbonyl as Co	0.1	0.007	0.005
7440-48-4	Cobalt metal, dust, and fume	0.05	0.0033	0.0025
7440-50-8	Copper:			
7440-50-8	Fume	0.2	0.013	0.01
7440-50-8	Dusts & mists, as Cu	1	0.067	0.05
95-48-7	o-Cresol	22	1.47	1.1
108-39-4	m-Cresol	22	1.47	1.1
106-44-5	p-Cresol	22	1.47	1.1
1319-77-3	Cresols/Cresylic Acid (isomers and mixtures)	22	1.47	1.1
123-73-9	Crotonaldehyde	5.7	0.38	0.285
299-86-5	Cruformate	5	0.333	0.25
98-82-8	Cumene	245	16.3	12.25
420-04-2	Cyanamide	2	0.133	0.1
592-01-8	Cyanide and compounds as CN	5	0.333	0.25
110-82-7	Cyclohexane	1050	70	52.5
108-93-0	Cyclohexanol	200	13.3	10
108-94-1	Cyclohexanone	100	6.67	5
110-83-8	Cyclohexene	1015	67.7	50.75
108-91-8	Cyclohexylamine	41	2.73	2.05
121-82-4	Cyclonite	1.5	0.1	0.075
542-92-7	Cyclopentadiene	200	13.3	10
287-92-3	Cyclopentane	1720	114.667	86

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
94-75-7	2,4-D	10	0.667	0.5
17702-41-9	Decaborane	0.3	0.02	0.015
8065-48-3	Demeton	0.1	0.007	0.005
123-42-2	Diacetone alcohol	240	16	12
39393-37-8	Dialkyl phthalate (ID)	---	16.4	2.46
107-15-3	1,2-Diaminoethane, See Ethylenediamine			
333-41-5	Diazinon	0.1	0.007	0.005
334-88-3	Diazomethane	0.34	0.023	0.017
19287-45-7	Diborane	0.1	0.007	0.005
102-81-8	2-N-Dibutylamino ethanol	14	0.933	0.7
2528-36-1	Dibutyl phenyl phosphate	3.5	0.233	0.175
107-66-4	Dibutyl phosphate	8.6	0.573	0.43
84-74-2	Dibutyl phthalate	5	0.333	0.25
7572-29-4	Dichloroacetylene	0.39	0.0026	0.0195
95-50-1	o-Dichlorobenzene	300	20	15
106-46-7	1,4-Dichlorobenzene	450	30	22.5
118-52-5	1,3-Dichloro-5, 5-dimethyl hydantoin	0.2	0.013	0.025
75-34-3	Dichloroethane	405	27	20.25
540-59-0	1,2-Dichloroethylene	790	52.7	39.5
111-44-4	Dichloroethyl ether	30	2	1.5
75-43-4	Dichlorofluoromethane	40	2.67	2
594-72-9	1, 1-Dichloro-1-nitroethane	10	0.667	0.5
78-87-5	1,2-Dichloropropane, see Propylene dichloride			
75-99-0	2,2-Dichloropropionic acid	6	0.4	0.3
62-73-7	Dichlorvos	1	0.067	0.05
141-66-2	Dicrotophos	0.25	0.017	0.125
77-73-6	Dicyclopentadiene	30	2	1.5
102-54-5	Dicyclopentadienyl iron	10	0.667	0.5
111-42-2	Diethanolamine	15	1	0.75
109-89-7	Diethylamine	30	2	1.5
100-37-8	2-Diethylamino-ethanol	50	3.33	2.5
111-40-0	Diethylene triamine	4	0.267	0.2
60-29-7	Diethyl ether, <del>see Ethyl ether</del>	1200	80	60
96-22-0	Diethyl Ketone	705	47	35.25

<b>CAS NUMBER</b>	<b>SUBSTANCE</b>	<b>OEL (mg/m3)</b>	<b>EL (lb/hr)</b>	<b>AAC (mg/m3)</b>
84-66-2	Diethyl phthalate	5	0.333	0.25
2238-07-5	Diglycidyl ether (DGE)	0.53	0.035	0.0265
123-31-9	Dihydroxybenzene, see Hydroquinone			
108-83-8	Diisobutyl ketone	145	9.67	7.25
108-18-9	Diisopropylamine	20	1.33	1
127-19-5	Dimethyl acetamide	35	2.33	1.75
124-40-3	Dimethylamine	9.2	0.613	0.46
60-11-7	Dimethyl aminoazo-benzene (NY)	---	0.002	0.0003
1300-73-8	Dimethylamino-benzene, see Xylidine			
121-69-7	Dimethylaniline (N,N-Dimethylaniline)	25	1.67	1.25
1330-20-7	Dimethylbenzene, see Xylene			
300-76-5	Dimethyl-1,2-dibromo-2-dichloroethyl phosphate, see Naled			
68-12-2	Dimethylformamide	30	2	1.5
108-83-8	2,6-Dimethyl-4-heptanone, see Diisobutyl ketone			
131-11-3	Dimethylphthalate	5	0.333	0.25
148-01-6	Dinitolmide	5	0.333	0.25
528-29-0	Dinitrobenzene	1	0.067	0.05
99-65-0	m (or) 1,3-Dinitrobenzene	1	0.067	0.05
100-25-4	p (or) 1,4-Dinitrobenzene	1	0.067	0.05
534-52-1	Dinitro-o-cresol	0.2	0.013	0.01
148-01-6	3,5-Dinitro-o-toluamide, see Dinitolmide			
117-84-0	N-Dioctyl Phthalate	5	0.333	0.25
78-34-2	Dioxathion	0.2	0.013	0.01
92-52-4	Diphenyl, see Biphenyl			
122-39-4	Diphenylamine	10	0.667	0.5
	Diphenyl methane diisocyanate, see Methylenediphenyl diisocyanate			
34590-94-8	Dipropylene glycol methyl ether	600	40	30
123-19-3	Dipropyl ketone	235	15.7	11.75
85-00-7	Diquat	0.5	0.033	0.01
97-77-8	Disulfiram	2	0.133	0.1
298-04-4	Disulfoton	0.1	0.007	0.005
128-37-0	2,6-Ditert. butyl-p-cresol	10	0.667	0.5

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
330-54-1	Diuron	10	0.667	0.5
108-57-6	Divinyl benzene	50	3.33	2.5
1302-74-5	Emery (corundum) total dust (> 1% silica)	10	0.667	0.5
115-29-7	Endosulfan	0.1	0.007	0.005
72-20-8	Endrin	0.1	0.007	0.005
13838-16-9	Enflurane	566	37.7	28.3
1395-21-7	Enzymes, see Subtilisins			
2104-64-5	EPN (Ethoxy-4-Nitro-phenoxy phenylphosphine)	0.5	0.033	0.025
106-88-7	1,2-Epoxybutane (MI)	---	0.8	0.6
75-56-9	1,2-Epoxypropane, see Propylene oxide			
556-52-5	2,3-Epoxy-1-propanol, see Glycidol			
75-08-1	Ethanethiol, see Ethyl mercaptan			
141-43-5	Ethanolamine	8	0.533	0.4
563-12-2	Ethion	0.4	0.027	0.02
110-80-5	2-Ethoxyethanol	19	1.27	0.95
111-15-9	2-Ethoxyethyl acetate (EGEEA)	27	1.8	1.35
141-78-6	Ethyl acetate	1400	93.3	70
64-17-5	Ethyl alcohol	1880	125	94
75-04-7	Ethylamine	18	1.2	0.9
541-85-5	Ethyl amyl ketone	130	8.67	6.5
100-41-4	Ethyl benzene	435	29	21.75
74-96-4	Ethyl bromide	22	1.47	1.1
106-35-4	Ethyl butyl ketone	230	15.3	11.5
51-79-6	Ethyl carbamate (Urethane) (WA)	---	0.002	0.0015
75-00-3	Ethyl chloride	2640	176	132
107-07-3	Ethylene chlorohydrin	3	0.2	0.15
107-15-3	Ethylenediamine	25	1.67	1.25
107-06-2	Ethylene dichloride	40	2.667	2
107-21-1	Ethylene glycol vapor (CL)	127	0.846	6.35
628-96-6	Ethylene glycol denigrate	0.31	0.021	0.016
110-49-6	Ethylene glycol methyl ether acetate, see 2-Methoxyethyl acetate			
96-45-7	Ethylene thiourea (PL2)	---	0.047	0.035
109-94-4	Ethyl formate	300	20	15

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
16219-75-3	Ethylidene norbornene (CL)	25	0.167	1.25
75-08-1	Ethyl mercaptan	1	0.067	0.05
100-74-3	N-Ethylmorpholine	23	1.53	1.15
78-10-4	Ethyl silicate	85	5.67	4.25
22224-92-6	Fenamiphos	0.1	0.007	0.005
115-90-2	Fensulfothion	0.1	0.007	0.005
55-38-9	Fenthion	0.2	0.013	0.01
14484-64-1	Ferbam	10	0.667	0.5
12604-58-9	Ferrovandium dust	1	0.067	0.05
NA	Fibrous glass dust	10	0.667	0.5
NA	Fine Mineral Fibers - Including: 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. (ID)	--	0.661	0.5
NA	Fluorides, as F	2.5	0.167	0.125
7782-41-4	Fluorine	2	0.133	0.1
944-22-9	Fonofos	0.1	0.007	0.005
75-12-7	Formamide	30	2	1.5
64-18-6	Formic acid	9.4	0.627	0.47
98-01-1	Furfural	8	0.533	0.4
98-00-0	Furfuryl alcohol	40	2.67	2
7782-65-2	Germanium tetrahydride	0.6	0.04	0.03
NA	Glass, Fibrous or dust, see Fibrous glass dust			
111-30-8	Glutaraldehyde (CL)	0.82	0.0047	0.041
556-52-5	Glycidol	75	5	3.75
110-80-5	Glycol monoethyl ether, see 2-Ethoxyethanol			
7440-58-6	Hafnium	0.5	0.033	0.025
110-43-0	2-Heptanone, see Methyl n-amyl ketone			
106-35-4	3-Heptanone, see Ethyl butyl ketone			
151-67-7	Halothane	404	26.9	20.2
142-82-5	Heptane (n-Heptane)	1640	109	82
77-47-4	Hexachlorocyclopentadiene	0.1	0.007	0.005
1335-87-1	Hexachloronaphthalene	0.2	0.013	0.010
684-16-2	Hexafluoroacetone	0.7	0.047	0.035
822-06-0	Hexamethylene diisocyanate	0.03	0.002	0.0015

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
680-31-9	Hexamethylphosphoramide (WA)	---	0.002	0.0015
110-54-3	Hexane (n-Hexane)	180	12	9
591-78-6	2-Hexanone, see Methyl n-butyl ketone			
108-10-1	Hexone, see Methyl isobutyl ketone			
108-84-9	sec-Hexyl acetate	300	20	15
107-41-5	Hexylene glycol (CL)	121	0.806	6.05
37275-59-5	Hydrogenated terphenyls	5	0.333	0.25
10035-10-6	Hydrogen bromide (CL)	10	0.0667	0.5
7647-01-0	Hydrogen chloride (CL)	7.5	0.05	0.375
7722-84-1	Hydrogen peroxide	1.5	0.1	0.075
7783-06-4	Hydrogen sulfide	14	0.933	0.7
123-31-9	Hydroquinone	2	0.133	0.1
123-42-2	4-Hydroxy-4-Methyl-2-pentanone, see Diacetone alcohol			
9969-61-1	2 -Hydroxypropyl acrylate	3	0.2	0.15
95-13-6	Indene	45	3	2.25
7440-74-6	Indium & compounds as In	0.1	0.007	0.005
7553-56-2	Iodine (CL)	0.1	0.0067	0.005
75-47-8	Iodoform	10	0.667	0.5
1309-37-1	Iron oxide fume (Fe2O3) as Fe	5	0.333	0.25
13463-40-6	Iron pentacarbonyl as Fe	0.8	0.053	0.04
7439-89-6	Iron salts, soluble, as Fe	1	0.067	0.05
123-92-2	Isoamyl acetate	525	35	26.25
123-51-3	Isoamyl alcohol	360	24	18
110-19-0	Isobutyl acetate	700	46.7	35
78-83-1	Isobutyl alcohol	150	10	6
26952-21-6	Isooctyl alcohol	270	18	13.5
78-59-1	Isophorone	28	1.867	1.4
4098-71-9	Isophorone diisocyanate	0.09	0.006	0.0045
109-59-1	Isopropoxyethanol	105	7	5.25
108-21-4	Isopropyl Acetate	1040	69.3	52
67-63-0	Isopropyl alcohol	980	65.3	49
75-31-0	Isopropylamine	12	0.8	0.6
643-28-7	N-Isopropylaniline	10	0.667	0.5
108-20-3	Isopropyl ether	1040	69.3	52

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
4016-14-2	Isopropyl glycidyl ether (IGE)	240	16	12
1332-58-7	Kaolin (respirable dust)	2	0.133	0.1
463-51-4	Ketene	0.9	0.06	0.045
7580-67-8	Lithium hydride	0.025	0.002	0.00125
546-93-0	Magnesite	10	0.667	0.5
1309-48-4	Magnesium oxide fume	10	0.667	0.5
121-75-5	Malathion	10	0.667	0.5
108-31-6	Maleic anhydride	1	0.067	0.05
7439-96-5	Manganese as Mn Including:			
7439-96-5	Dust & compounds	5	0.333	0.25
7439-96-5	Fume	1	0.067	0.05
101-68-8	MDI, see Methylene diphenyl isocyanate			
NA	Mercaptans not otherwise listed (ID)	---	0.033	0.025
141-79-7	Mesityl oxide	60	4	3
79-41-4	Methacrylic acid	70	4.67	3.5
74-93-1	Methanethiol, see Methyl mercaptan			
67-56-1	Methanol	260	17.3	13
16752-77-5	Methomyl	2.5	0.17	0.125
72-43-5	Methoxychlor	10	0.667	0.5
109-86-4	2-Methoxyethanol	16	1.07	0.8
110-49-6	2-Methoxyethyl acetate	24	1.6	1.2
150-76-5	4-Methoxyphenol	5	0.333	0.25
108-65-6	1-methoxy-2-proanol acetate (ID)	n/a	24	3.6
79-20-9	Methyl acetate	610	40.7	30.5
74-99-7	Methyl acetylene	1640	109	82
NA	Methyl acetylene-propadiene mix (MAPP)	1640	109	82
96-33-3	Methyl acrylate	35	2.33	1.75
126-98-7	Methylacrylonitrile	3	0.2	0.15
74-89-5	Methylamine	12	0.8	0.6
108-11-2	Methyl emyl alcohol, see Methyl isobutyl carbinol			
110-43-0	Methyl n-amyl ketone	235	15.7	11.75
100-61-8	N-Methyl aniline	2	0.133	0.1
74-83-9	Methyl bromide	19	1.27	0.95
591-78-6	Methyl n-butyl ketone	20	1.33	1

CAS NUMBER	SUBSTANCE	OEL (mg/m <sup>3</sup> )	EL (lb/hr)	AAC (mg/m <sup>3</sup> )
<del>109-86-4</del>	<del>Methyl cellosolve (2-Methoxyethanol)</del>	<del>15.6</del>	<del>1.04</del>	<del>0.78</del>
74-87-3	Methyl chloride	103	6.867	5.15
71-55-6	Methyl chloroform	1910	127	95.5
137-05-3	Methyl 2-cyano-acrylate	8	0.533	0.4
25639-42-3	Methylcyclohexanol	235	15.7	11.75
583-60-8	o-Methylcyclohexanone	230	15.3	11.5
8022-00-2	Methyl demeton	0.5	0.033	0.01
101-68-8	Methylenediphenyl diisocyanate (MDI)	0.05	0.003	0.0025
5124-30-1	Methylene bis (4-cyclohexyl isocyanate)	0.11	0.007	0.0055
78-93-3	Methyl ethyl ketone (MEK)	590	39.3	29.5
1338-23-4	Methyl ethyl ketone peroxide (CL)	1.5	0.01	0.0075
107-31-3	Methyl formate	246	16.4	12.3
541-85-5	5-Methyl-3-heptanone, see Ethyl amyl ketone			
110-12-3	Methyl isoamyl ketone	240	16	12
108-11-2	Methyl isobutyl carbinol	104	6.93	5.2
108-10-1	Methyl isobutyl ketone	205	13.7	10.25
624-83-9	Methyl isocyanate	0.05	0.003	0.0025
563-80-4	Methyl isopropyl ketone	705	47	35.25
74-93-1	Methyl mercaptan	0.5	0.033	0.025
80-62-6	Methyl methacrylate	410	27.3	20.5
298-00-0	Methyl parathion	0.2	0.013	0.01
107-87-9	Methyl propyl ketone	700	46.7	35
681-84-5	Methyl silicate	6	0.4	0.3
98-83-9	α-Methyl styrene	240	16	10.20
109-87-5	Methylal (dimethoxymethane)	3110	207	155.5
108-87-2	Methylcyclohexane	1610	107	80.5
21087-64-9	Metribuzin	5	0.333	0.25
7786-34-7	Mevinphos	0.1	0.007	0.005
12001-26-2	Mica (Respirable dust)	3	0.2	0.15
NA	Mineral Wool Fiber (no asbestos)	10	0.667	0.5
7439-98-7	Molybdenum as Mo - Including:			
NA	Soluble compounds	5	0.333	0.25
NA	Insoluble compounds	10	0.667	0.5
108-90-7	Monochlorobenzene, see Chlorobenzene			



CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
6923-22-4	Monocrotophos	0.25	0.017	0.0125
110-91-8	Morpholine	70	4.67	0.35
300-76-5	Naled	3	0.2	0.15
91-20-3	Naphthalene	50	3.33	2.5
54-11-5	Nicotine	0.5	0.033	0.025
1929-82-4	Nitrapyrin	10	0.667	0.5
7697-37-2	Nitric acid	5	0.333	0.25
100-01-6	p-Nitroaniline	3	0.2	0.15
98-95-3	Nitrobenzene	5	0.333	0.25
100-00-5	p-Nitrochlorobenzene	3	0.2	0.15
79-24-3	Nitroethane	310	20.7	15.5
7783-54-2	Nitrogen trifluoride	29	1.93	1.45
55-63-0	Nitroglycerin	0.46	0.031	0.023
75-52-5	Nitromethane	50	3.333	2.5
108-03-2	1-Nitropropane	90	6	4.5
99-08-1	m (or) 3-Nitrotoluene	11	0.733	0.55
88-72-2	o (or) 2-Nitrotoluene	11	0.733	0.55
99-99-0	p (or) 4-Nitrotoluene	11	0.733	0.55
76-06-2	Nitrotrichloromethane, see Chloropicrin			
10024-97-2	Nitrous oxide	90	6	4.5
111-84-2	Nonane	1050	70	52.5
2234-13-1	Octachloronaphthalene	0.1	0.007	0.005
111-65-9	Octane	1400	93.3	70
NA	Oil mist, mineral	5	0.333	0.25
20816-12-0	Osmium tetroxide as Os	0.002	0.0001	0.0001
144-62-7	Oxalic acid	1	0.067	0.05
7783-41-7	Oxygen difluoride (CL)	0.11	0.0007	0.0005
8002-74-2	Paraffin wax fume	2	0.133	0.1
4685-14-7	Paraquat	0.1	0.007	0.007
NA	Paraquat, all Compounds	0.1	0.007	0.005
56-38-2	Parathion	0.1	0.007	0.005
19624-22-7	Pentaborane	0.01	0.001	0.0005
1321-64-8	Pentachloronaphthalene	0.5	0.033	0.025
82-68-8	Pentachloronitrobenzene	0.5	0.0333	0.025

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
87-86-5	Pentachlorophenol	0.5	0.033	0.025
109-66-0	Pentane	1770	118	88.5
107-87-9	2-Pentanone, see Methyl propyl ketone			
594-42-3	Perchloromethyl mercaptan	0.8	0.053	0.04
7616-94-6	Perchloryl Fluoride	13	0.867	0.65
93763-70-3	Perlite	10	0.667	0.5
532-27-4	Phenacyl chloride, see a-Chloroacetophenone			
108-95-2	Phenol	19	1.27	0.95
92-84-2	Phenothiazine	5	0.333	0.25
108-45-2	m-Phenylenediamine	0.1	0.0067	0.005
106-50-3	p-Phenylenediamine	0.1	0.007	0.005
101-84-8	Phenyl ether, vapor	7	0.467	0.035
122-60-1	Phenyl glycidyl ether (PGE)	6	0.4	0.3
108-98-5	Phenyl mercaptan	2	0.133	0.1
638-21-1	Phenylphosphine (CL)	0.25	0.0017	0.00125
298-02-2	Phorate	0.05	0.003	0.001
7786-34-7	Phosdrin, see Mevinphos			
75-44-5	Phosgene	0.4	0.027	0.02
7803-51-2	Phosphine	0.4	0.027	0.02
7664-38-2	Phosphoric acid	1	0.067	0.05
7723-14-0	Phosphorus	0.1	0.007	0.005
10025-87-3	Phosphorus oxychloride	0.6	0.04	0.030
10026-13-8	Phosphorus penta-chloride	1	0.067	0.05
1313-80-3	Phosphorus penta-sulfide	1	0.067	0.05
1314-56-3	Phosphorus pentoxide (ID)	--	0.067	0.05
7719-12-2	Phosphorus trichloride	1.5	0.1	0.075
85-44-9	Phthalic anhydride	6	0.4	0.3
626-17-5	m-Phthalodinitrile	5	0.333	0.25
1918-02-1	Picloram	10	0.667	0.5
88-89-1	Picric acid	0.1	0.006	0.005
83-26-1	Pindone	0.1	0.007	0.005
142-64-3	Piperazine dihydro-chloride	5	0.333	0.25
83-26-1	2-Pivaloyl-1,3-indandione, see Pindone			
7440-06-4	Platinum - Including:			

CAS NUMBER	SUBSTANCE	OEL (mg/m <sup>3</sup> )	EL (lb/hr)	AAC (mg/m <sup>3</sup> )
7440-06-4	Metal	1	0.067	0.05
NA	Soluble salts, as Pt	0.002	0.0001	0.0001
65997-15-1	Portland cement	10	0.667	0.5
1310-58-3	Potassium hydroxide	2	0.133	0.1
107-19-7	Propargyl alcohol	2.3	0.153	0.115
123-38-6	Propionaldehyde (LA)	0.43	0.0287	0.0215
79-09-4	Propionic acid	30	2	1.5
114-26-1	Propoxur (Baygon)	0.5	0.033	0.025
109-60-4	n-Propyl acetate	840	56	42
71-23-8	Propyl alcohol	500	33.3	25
78-87-5	Propylene dichloride	347	23.133	17.35
6423-43-4	Propylene glycol dinitrate	0.34	0.023	0.017
107-98-2	Propylene glycol monomethyl ether	360	24	18
75-56-9	Propylene oxide	48	3.2	2.4
627-13-4	n-Propyl nitrate	105	7	5.25
8003-34-7	Pyrethrum	5	0.333	0.25
110-86-1	Pyridine	15	1	0.75
120-80-9	Pyrocatechol, see Catechol			
106-51-4	Quinone	0.4	0.027	0.02
121-84-4	RDX, see Cyclonite			
NA	Refractory Ceramic Fibers (see entry for specific content of emissions, ex: silica)			
108-46-3	Resorcinol	45	3	2.25
7440-16-6	Rhodium - Including:			
7440-16-6	Metal	1	0.067	0.05
NA	Insoluble compounds, as Rh	1	0.067	0.05
NA	Soluble compounds, as Rh	0.01	0.001	0.0005
299-84-3	Ronnel	10	0.667	0.5
83-79-4	Rotenone (commercial)	5	0.333	0.25
8030-30-6	Rubber solvent (Naphtha)	1590	106	79.5
14167-9618-1	Salcoine as CO	0.1	0.007	0.005
7782-49-2	Selenium	0.2	0.013	0.010
NA	Selenium and compounds as Se	0.2	0.013	0.01

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
136-78-7	Sesone	10	0.667	0.5
7803-62-5	Silane, see silicon tectrahydride			
NA	Silica - amorphous - Including:			
61790-53-2	Diatomaceous earth (uncalcined)	10	0.667	0.5
112926-00-8	Precipitated silica	10	0.667	0.5
112926-00-8	Silica gel	10	0.667	0.5
NA	Silica, crystalline - Including:			
14464-46-1	Cristobalite	0.05	0.0033	0.0025
14808-60-7	quartz	0.1	0.0067	0.005
60676-86-0	silica, fused	0.1	0.0067	0.005
15468-32-3	tridymite	0.05	0.0033	0.0025
1317-95-9	Tripoli	0.1	0.0067	0.005
7440-21-3	Silicon	10	0.667	0.5
409-21-2	Silicon carbide	10	0.667	0.5
7803-62-5	Silicon tetrahydride	7	0.467	0.35
7440-22-4	Silver - Including			
7440-22-4	Metal	0.1	0.007	0.005
7440-22-4	Soluble compounds, as Ag	0.01	0.001	0.005
26628-22-8	Sodium azide (CL)	0.3	0.002	0.0015
7631-90-5	Sodium bisulfite	5	0.333	0.25
136-78-7	Sodium 2,4-dichloro-phenoxyethyl sulfate, see Sesone			
62-74-8	Sodium fluoroacetate	0.05	0.003	0.0025
1310-73-2	Sodium hydroxide	2	0.133	0.1
7681-57-4	Sodium metabisulfite	5	0.333	0.25
NA	Stearates (not including toxic metals)	10	0.667	0.5
7803-52-3	Stibine	0.5	0.033	0.025
8052-41-3	Stoddard solvent	525	35	26.25
57-24-9	Strychnine	0.15	0.01	0.0075
60-41-3	Strychnine sulfate as strichnine	0.15	0.01	0.01
100-42-5	Styrene monomer (ID)	--	6.67	1
1395-21-7	Subtilisins (Proteolytic enzymes as 100% pure crystalline enzyme)	0.00006	4.OE-07	3.0E-7
3689-24-5	Sulfotep	0.2	0.013	0.01
7664-93-9	Sulfuric acid	1	0.067	0.05

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
10025-67-9	Sulfur monochloride (CL)	6	0.04	0.03
5714-22-7	Sulfur pentafluoride (CL)	0.1	0.0007	0.0005
7783-60-0	Sulfur tetrafluoride (CL)	0.4	0.0027	0.002
2699-79-8	Sulfuryl fluoride	20	1.33	1
35400-43-2	Sulprofos	1	0.067	0.05
8065-48-3	Systox, see Demeton			
93-76-5	2,4,5-Trichlorophen-oxyacetic acid (2,4,5,-T)	10	0.667	0.05
7440-25-7	Tantalum	5	0.333	0.25
3689-24-5	TEDP, see Sulfotep			
13494-80-9	Tellurium & Compounds as Te	0.1	0.007	0.005
7783-80-4	Tellurium hexafluoride as Te	0.2	0.013	0.01
3383-96-8	Temephos	10	0.667	0.5
107-49-3	TEPP (Tetraethyl-pyrophosphate)	0.05	0.003	0.0025
26140-60-3	Terphenyls	4.7	0.313	0.235
1335-88-2	Tetrachloronaphthalene	2	0.133	0.10
78-00-2	Tetraethyl Lead	0.1	0.007	0.005
597-64-8	Tetraethyltin as organic tin	0.1	0.007	0.005
109-99-9	Tetrahydrofuran	590	39.3	29.5
75-74-1	Tetramethyl lead, as Pb	0.15	0.01	0.0075
3333-52-6	Tetramethyl succinonitrile	3	0.2	0.15
509-14-8	Tetranitromethane	8	0.533	0.4
7722-88-5	Tetrasodium pyrophosphate	5	0.333	0.25
479-45-8	Tetryl	1.5	0.1	0.075
7440-28-0	Thallium, soluble Compounds, as Tl	0.1	0.007	0.005
96-69-5	4,4-Thiobis (6 tert, butyl-m-cresol)	10	0.667	0.5
68-11-1	Thioglycolic acid	4	0.267	0.2
7719-09-7	Thionyl chloride (CL)	4.9	0.0327	0.245
137-26-8	Thiram	5	0.333	0.25
7440-31-5	Tin - Including:			
7440-31-5	Metal	2	0.133	0.1
NA	Oxide & inorganic compounds, except SnH4, as Sn	2	0.133	0.1
NA	Organic compounds as Sn	0.1	0.007	0.005
108-88-3	Toluene (toluol)	375	25	18.75
584-84-9	Toluene-2,4-di-isocyanate (TDI)	0.04	0.003	0.002

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
10-41-54	p-Toluenesulfonic acid (ID)	n/a	0.067	0.05
126-73-8	Tributyl phosphate	2.2	0.147	0.11
76-03-9	Trichloroacetic acid	7	0.467	0.35
120-82-1	1,2,4-Trichlorobenzene (CL)	37	2.47	1.85
79-01-6	Trichloroethylene	269	17.93	13.45
1321-65-9	Trichloronaphthalene	5	0.333	0.25
76-06-2	Trichloronitromethane, See Chloropicrin			
95-95-4	2,4,5-Trichlorophenol (MA)	---	---	0.0016
96-18-4	1,2,3-Trichloropropane	60	4	3
121-44-8	Triethylamine	4.1	0.27	0.2
1582-09-8	Trifluralin (PL3)	---	7.7	1.15
552-30-7	Trimellitic anhydride	0.04	0.003	0.002
75-50-3	Trimethylamine	12	0.8	0.6
25551-13-7	Trimethyl benzene (mixed and individual isomers)	123	8.2	6.15
540-84-1	2,2,4-Trimethyl-pentane	350	23.3	17.5
121-45-9	Trimethyl phosphite	10	0.667	0.5
479-45-8	2,4,6-Trinitrophenyl-methylnitramine, see Tetryl			
78-30-8	Triorthocresyl phosphate	0.1	0.007	0.005
603-34-9	Triphenyl amine	5	0.333	0.25
115-86-6	Triphenyl phosphate	3	0.2	0.15
7440-33-7	Tungsten - Including:			
NA	Insoluble compounds	5	0.333	0.25
NA	Soluble compounds	1	0.067	0.05
8006-64-2	Turpentine	560	37.3	28
7440-61-1	Uranium (natural) Soluble & insoluble compounds as U	0.2	0.013	0.01
110-62-3	n-Valeraldehyde	175	11.7	8.75
1314-62-1	Vanadium, as V2O5 Respirable Dust & fume	0.05	0.003	0.0025
108-05-4	Vinyl acetate ( <del>ID</del> )	<del>0.2</del> 35	2.3	1.75
25013-15-4	Vinyl toluene	240	16	12
8032-32-4	VM & P Naphtha	1370	91.3	68.5
81-81-2	Warfarin	0.1	0.007	0.005
1330-20-7	Xylene (o-, m-, p-isomers)	435	29	21.75
1477-55-0	m-Xylene a, a-diamine (CL)	0.1	0.0007	0.0005

CAS NUMBER	SUBSTANCE	OEL (mg/m3)	EL (lb/hr)	AAC (mg/m3)
1300-73-8	Xylidine	2.5	1.67	0.125
7440-65-5	Yttrium (Metal and compounds as Y)	1	0.067	0.05
7440-66-6	Zinc metal (ID)	--	0.667	0.5
7646-85-7	Zinc chloride fume	1	0.067	0.05
1314-13-2	Zinc oxide fume	5	0.333	0.05
1314-13-2	Zinc oxide dust	10	0.667	0.5
7440-67-7	Zirconium compounds as Zr	5	0.333	0.25

(4-7-11)( )

**586. TOXIC AIR POLLUTANTS CARCINOGENIC INCREMENTS.**

The screening emissions levels (EL) and acceptable ambient concentrations (AACC) for carcinogens are as provided in the following table. The AACC in this section are annual averages.

CAS NUMBER	SUBSTANCE	URF	EL lb/hr	AACC ug/m3
75-07-0	Acetaldehyde	2.2E-06	3.0E-03	4.5E-01
79-06-1	Acrylamide	1.3E-03	5.1E-06	7.7E-04
107-13-1	Acrylonitrile	6.8E-05	9.8E-05	1.5E-02
309-00-2	Aldrin	4.9E-03	1.3E-06	2.0E-04
62-53-3	Aniline	7.4E-06	9.0E-04	1.4E-01
140-57-8	Aramite	7.1E-06	9.3E-04	1.4E-01
NA	Aroclor, all (PCB) (ID)	---	6.6E-05	1.0E-02
7440-38-2	Arsenic compounds	4.3E-03	1.5E-06	2.3E-04
1332-21-4	Asbestos (Fibers /M.L.)	2.3E-01	N/A	4.0E-06
71-43-2	Benzene	8.3E-06	8.0E-04	1.2E-01
92-87-5	Benzidine	6.7E-02	9.9E-08	1.5E-05
50-32-8	Benzo(a)pyrene	3.3E-03	2.0E-06	3.0E-04
7440-41-7	Beryllium & compounds	2.4E-04	2.8E-05	4.2E-03
106-99-0	1,3-Butadiene	2.8E-04	2.4E-05	3.6E-03
111-44-4	Bis (2-chloroethyl) ether	3.3E-04	2.0E-05	3.0E-03
542-88-1	Bis (chloromethyl) ether	6.2E-02	1.0E-07	1.6E-05
108-60-1	Bis (2-chloro-1-methyl- ethyl) ether	2.0E-05	3.3E-04	5.0E-02
117-81-7	Bis (2-ethylhexyl) phthalate	2.4E-07	2.8E-02	4.2E+00
7440-43-9	Cadmium and compounds	1.8E-03	3.7E-06	5.6E-04
56-23-5	Carbon tetrachloride	1.5E-05	4.4E-04	6.7E-02

CAS NUMBER	SUBSTANCE	URF	EL lb/hr	AACC ug/m3
57-74-9	Chlordane	3.7E-04	1.8E-04	2.7E-03
67-66-3	Chloroform	2.3E-05	2.8E-04	4.3E-02
<del>7440-47-3</del> <del>18540-29-9</del>	Chromium (VI) & compounds as Cr+6	1.2E-02	5.6E-07	8.3E-05
NA	Coal Tar Volatiles as benzene			
NA	Coke oven emissions	6.2E-04	1.1E-05	1.6E-03
8001-58-9	Creosote (ID) See coal tar volatiles as benzene extractables			
50-29-3	DDT (Dichlorodi phenyltrichloroethane)	9.7E-05	6.8E-05	1.0E-02
96-12-8	1,2-Dibromo-3-chloropropane	6.3E-03	1.0E-06	1.6E-04
75-34-3	1,1 dichloroethane	2.6E-05	2.5E-04	3.8E-02
107-06-2	1,2 dichloroethane	2.6E-05	2.5E-04	3.8E-02
75-35-4	1,1 dichloroethylene	5.0E-05	1.3E-04	2.0E-02
75-09-2	Dichloromethane (Methylenechloride)	4.1E-06	1.6E-03	2.4E-01
542-75-6	1,3 dichloropropene	3.5E-01	1.9E-07	2.9E-06
764-41-0	1,4-Dichloro-2-butene	2.6E-03	2.5E-06	3.8E-04
60-57-1	Dieldrin	4.6E-03	1.4E-06	2.1E-04
56-53-1	Diethylstilbestrol	1.4E-01	4.7E-08	7.1E-06
123-91-1	1,4 dioxane	1.4E-06	4.8E-03	7.1E-01
	Dioxin and Furans (2,3,7,8,TCDD & mixtures) Dioxin and Furan emissions shall be considered as one TAP and expressed as an equivalent emission of 2,3,7,8, TCDD based on the relative potency of the isomers in accordance with US EPA guidelines. <a href="#">Copies of EPA Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs). 1989 Updates are available by requesting EPA/625/3-89/016, March 1989 from ORD Publications (513) 684-7562. U.S. EPA (Environmental Protection Agency), (2010). Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2,3,7,8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds. Risk Assessment Forum, Washington, DC. EPA/600/R-10/005.</a>			
122-66-7	1,2-Diphenylhydrazine	2.2E-04	3.0E-05	4.5E-03
106-89-8	Epichlorohydrin	1.2E-06	5.6E-03	8.3E-01
106-93-4	Ethylene dibromide	2.2E-04	3.0E-05	4.5E-03
75-21-8	Ethylene oxide	1.0E-04	6.7E-05	1.0E-02
50-00-0	Formaldehyde	1.3E-05	5.1E-04	7.7E-02
76-44-8	Heptachlor	1.3E-03	5.1E-06	7.7E-04
1024-57-3	Heptachlor Epoxide	2.6E-03	2.5E-06	3.5E-04
118-74-1	Hexachlorobenzene	4.9E-04	1.3E-05	2.0E-03
87-68-3	Hexachlorobutadiene	2.0E-05	3.3E-04	5.0E-02



CAS NUMBER	SUBSTANCE	URF	EL lb/hr	AACC ug/m3
	Hexachlorocyclo-hexane, Technical	5.1E-04	1.3E-05	1.9E-03
319-84-6	Hexachlorocyclohexane (Lindane) Alpha (BHC)	1.8E-03	3.7E-06	5.6E-04
<del>319-86-8</del>	<del>alpha-Hexachlorocyclohexane</del>	<del>1.8E-03</del>	<del>3.6E-06</del>	<del>5.6E-03</del>
319-85-7	Hexachlorocyclohexane (Lindane) Beta (BHC)	5.3E-04	1.3E-05	1.8E-03
<del>319-86-8</del>	<del>b-Hexachlorocyclohexane</del>	<del>5.3E-04</del>	<del>1.3E-06</del>	<del>1.9E-04</del>
58-89-9	Hexachlorocyclohexane (Lindane) Gamma (BHC)	3.8E-04	1.7E-05	2.6E-03
67-72-1	Hexachloroethane	4.0E-06	1.7E-03	2.5E-01
301-01-2	Hydrazine	2.9E-03	2.3E-06	3.4E-04
<del>302-01-2</del> <del>10034-93-2</del>	Hydrazine Sulfate	2.9E-03	2.2E-06	3.5E-04
56-49-5	3-methylcholanthrene	2.7E-03	2.5E-06	3.7E-04
75-09-2	Methylene Chloride	4.1E-06	1.6E-03	2.4E-01
74-87-3	Methyl chloride	3.6E-06	1.9E-03	2.8E-01
101-14-4	4,4-Methylene bis(2-Chloroaniline)	4.7E-05	1.4E-04	2.1E-02
60-34-4	Methyl hydrazine	3.1E-04	2.2E-05	3.2E-03
7440-02-0	Nickel	2.4E-04	2.7E-05	4.2E-03
12035-72-2	Nickel Subsulfide	4.8E-04	1.4E-05	2.1E-02
7440-02-0	Nickel Refinery Dust	2.4E-04	2.8E-05	4.2E-02
79-46-9	2-Nitropropane	2.7E-02	2.5E-07	3.7E-05
55-18-5	N-Nitrosodiethylamine (diethylnitrosoamine) (DEN)	4.3E-02	1.5E-07	2.3E-05
62-75-9	N-Nitrosodimethylamine	1.4E-02	4.8E-07	7.1E-05
924-16-3	N-Nitrosodi-n-butylamine	1.6E-03	4.1E-06	6.3E-04
930-55-2	N-Nitrosopyrrolidine	6.1E-04	1.1E-05	1.6E-03
684-93-5	N-Nitroso-N-methylurea (NMU)	3.5E-01	1.9E-08	2.9E-06
<del>794-93-4</del>	<del>Panfuran S (see dihydroxymethyl furatrizine)</del>			
82-68-8	Pentachloronitrobenzene	7.3E-05	9.1E-05	1.4E-02
127-18-4	Perchloroethylene (see tetrachloroethylene)			
NA	Polyaromatic Hydrocarbons ( <u>except 7-PAH group</u> )	7.3E-05	9.1E-05	1.4E-02
	(Polycyclic Organic Matter <u>or 7-PAH group</u> ) For emissions of <u>the 7-PAH mixtures group</u> , the following PAHs <u>and</u> shall be considered together as one TAP, equivalent in potency to benzo(a)pyrene: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, chrysene, indeno(1,2,3,-cd)pyrene, benzo(a)pyrene. (WA)			
23950-58-5	Promanide	4.6E-06	1.5E-03	2.2E-01
50-55-5	Reserpine	3.0E-03	2.2E-06	3.3E-04

CAS NUMBER	SUBSTANCE	URF	EL lb/hr	AACC ug/m3
1746-01-6	2,3,7,8,-Tetrachlorodibenzo-p-dioxin (2,3,7,8, -TCDD)	4.5.E+01	1.5E-10	2.2E-08
NA	Soots and Tars (ID) See coal tar volatiles as benzene extractables.			
79-34-5	1,1,2,2,Tetrachloro-ethane	5.8E-05	1.1E-05	1.7E-02
127-18-4	Tetrachloroethylene	4.8E-07	1.3E-02	2.1E+00
79-00-5	1,1,2 - trichloroethane	1.6E-05	4.2E-04	6.2E-02
62-56-6	Thiourea	5.5E-04	1.2E-05	1.8E-03
8001-35-2	Toxaphene	3.2E-04	2.0E-05	3.0E-03
79-01-6	Trichloroethylene	1.3E-06	5.1E-04	7.7E-01
88-06-2	2,4,6 - Trichlorophenol	5.7E-06	1.2E-03	1.8E-01
75-01-4	Vinyl chloride	7.1E-06	9.4E-04	1.4E-01

(3-30-01)( )

**(BREAK IN CONTINUITY OF SECTIONS)**

**792. EMISSIONS STANDARDS FOR NONMETALLIC MINERAL PROCESSING PLANTS SUBJECT TO 40 CFR 60, SUBPART 000.**

~~Owners and operators of nonmetallic mineral processing plants subject to a requirement of the New Source Performance Standards (NSPS) in 40 CFR 60, Subpart 000 shall comply with the emissions standards set forth in this section.~~ (3-15-02)

~~**01. NSPS Regulated Processing Plants.** Affected facilities in fixed or portable plants that commence construction, reconstruction, or modification after August 31, 1983, except that the standards do not apply to the following operations:~~ (3-15-02)

~~**a.** All facilities located in underground mines; and stand-alone screening operations at plants without crushers or grinding mills.~~ (3-15-02)

**01. Applicability and Designation of Affected Facilities.** The provisions of 40 CFR 60.670(a)(1) are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants that commence construction, modification, or reconstruction after August 31, 1983: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including the first storage silo or bin, are subject to the provisions of 40 CFR 60.670(a)(1). ( )

**02. Facilities Not Applicable to 40 CFR 60.670(a)(2), (b), and (c).** The provisions of 40 CFR 60.670(a)(2), (b), and (c) do not apply to the following operations: all facilities located in underground mines, plants without crushers or grinding mills above ground, and wet processing operations (as defined in 40 CFR 60.671). ( )

**ba.** An affected facility that is subject to the provisions of 40 CFR 60, Subpart F (Standards of Performance for Portland Cement Plants) or Subpart I (Standards of Performance for Hot Mix Asphalt Plants) or that

~~follows the in plant process any facility subject to the provisions of 40 CFR 60, Subparts F or I, is not subject to the provisions of 40 CFR 60, Subpart OOO.~~ (3-15-02)( )

~~e. Facilities with capacities as defined in 40 CFR 60.671 of:~~ (3-15-02)

~~b. Facilities at the following plants are not subject to the provisions of 40 CFR 60, Subpart OOO:~~ ( )

~~i. Fixed sand and gravel plants and crushed stone plants with capacities, as defined in 40 CFR 60.671, of twenty-three (23) megagrams per hour (twenty-five (25) tons per hour) or less;~~ (3-15-02)( )

~~ii. Portable sand and gravel plants and crushed stone plants with capacities, as defined in 40 CFR 60.671, of one hundred thirty-six (136) megagrams per hour (one hundred fifty (150) tons per hour) or less; and~~ (3-15-02)( )

~~iii. Common clay plants and pumice plants with capacities, as defined in 40 CFR 60.671, of nine (9) megagrams per hour (ten (10) tons per hour) or less.~~ (3-15-02)( )

~~**03. Standards of Performance for Nonmetallic Mineral Processing Plants.** Affected facilities subject to 40 CFR 60, Subpart OOO, shall comply with all applicable emissions standards, monitoring requirements, test methods and procedures, and reporting and recordkeeping requirements.~~ ( )

~~**02- Affected Facilities.** The following components in fixed or portable nonmetallic mineral processing plants, except as provided in Subsections 792.01.a., 792.01.b., and 792.01.e. are defined as affected facilities under the 40 CFR 60, Subpart OOO requirements: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station.~~ (3-15-02)

~~**03- NSPS Particulate Matter Emissions Standards.** The standard for particulate matter is set forth in 40 CFR 60.672, which states:~~ (3-15-02)

~~a. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:~~ (3-15-02)

~~i. Contain particulate matter in excess of five one-hundredths (0.05) grams per dry standard cubic meter (G/dscm); and~~ (3-15-02)

~~ii. Exhibit greater than seven percent (7%) opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of 40 CFR 60.676 (e), (d), and (e).~~ (3-15-02)

~~b. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than one hundred eighty (180) days after initial startup as required under 40 CFR 60.11, no owner or operator subject to the provisions of 40 CFR Part 60, Subpart OOO shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than ten percent (10%) opacity, except as provided in Subsections 792.03.e., 792.03.d. and 792.03.e.~~ (3-15-02)

~~e. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than one hundred eighty (180) days after initial startup as required under 40 CFR 60.11, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than fifteen percent (15%) opacity.~~ (3-15-02)

~~d. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.~~ (3-15-02)

~~e. If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emissions limits in Subsections 792.03.a., 792.03.b. and 792.03.c., or the building enclosing the affected facility or facilities must comply with the following emission limits: (3-15-02)~~

~~i. No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 40 CFR 60.671. (3-15-02)~~

~~ii. No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in Subsection 792.03.a. (3-15-02)~~

~~f. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than one hundred eighty (180) days after initial startup as required under 40 CFR 60.11, no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than seven percent (7%) opacity. (3-15-02)~~

~~g. Owners or operators of multiple storage bins with combined stack emissions shall comply with the emission limits in Subsections 792.03.a.i. and 792.03.a.ii. of Section 792. (3-15-02)~~

~~h. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than one hundred eighty (180) days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from: (3-15-02)~~

~~i. Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin. (3-15-02)~~

~~ii. Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line. (3-15-02)~~

~~i. Opacity determinations for NSPS required emissions standards shall be in accordance with 40 CFR 60 as required in Subsection 625.04.e. (3-15-02)~~

~~04. **Visible Emissions Standards for Roads and Stockpiles.** Visible fugitive emissions from vehicle traffic on an affected paved public roadway; vehicle traffic on, or wind erosion of, an unpaved haul road; and wind erosion of any stockpile shall not exceed twenty percent (20%) opacity for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period. Opacity shall be determined using the test methods and procedures contained in Section 625. The plant is not required to have a certified opacity reader. (3-15-02)~~

~~05. **Performance Testing.** Performance testing shall be conducted in accordance with all applicable requirements set forth in 40 CFR 60, Subpart OOO. A written report of the results of the performance test shall be submitted to the Environmental Protection Agency (EPA) in accordance with 40 CFR 60 and a copy submitted to the Department. If performance testing has already been conducted, test documentation shall be kept at the site of operations or at another accessible location and shall be made available to Department representatives upon request. (3-15-02)~~

**(BREAK IN CONTINUITY OF SECTIONS)**

**794. PERMIT REQUIREMENTS.**

No owner or operator may commence construction, reconstruction, modification or operation of any source at a nonmetallic mineral processing plant regardless of whether or not the source is an affected facility pursuant to 40

CFR 60.670(e) without first obtaining a permit or complying with Sections 795 through 799. The owner or operator shall comply with the permitting requirements of Subsection 794.01 or Subsection 794.02 and the applicable portions of Subsection 794.03 and/or Subsection 794.04. ~~(3-15-02)~~( )

**01. Permit by Rule.** Owners and operators of nonmetallic mineral processing plants that meet all of the applicable requirements set forth in Sections 795 through 799 shall be deemed to have a permit by rule (PBR) and shall not be required to obtain a permit to construct under Sections 200 through 228. (3-15-02)

**02. Permit to Construct.** Owners and operators of nonmetallic mineral processing plants that do not meet all of the requirements set forth in Sections 795 through 799, or that operate or intend to operate a nonmetallic mineral processing plant at a single site of operations for more than twelve (12) consecutive months, or that choose to construct and operate under specific permit requirements rather than the provisions of the permit by rule shall obtain a permit to construct pursuant to Sections 200 through 228. An existing permit to construct shall be considered valid until the permit is modified, incorporated into a Tier II operating permit, or terminated by the Department. Existing permits to construct may be terminated by the Department by registering the source under the permit by rule provisions in accordance with Section 797 after June 15, 2001. (3-15-02)

**03. Tier I Operating Permits.** Owners and operators of nonmetallic mineral processing plants that are affected facilities subject to a requirement of the New Source Performance Standards (NSPS) in 40 CFR 60 are Tier I sources as defined in Section 006. Tier I sources must comply with the applicable permitting requirements of Sections 300 through 399. (4-11-06)

**04. Tier II Operating Permits.** Owners and operators of nonmetallic mineral processing plants that are required by the Department or choose to obtain a Tier II operating permit pursuant to Sections 400 through 410 shall operate in accordance with the specific provisions of the Tier II operating permit until such time as the operating permit is terminated in writing by the Department. The Department may require owners and operators of nonmetallic mineral processing plants to obtain a Tier II operating permit whenever the Department determines that: (3-15-02)

**a.** Emission rate reductions are necessary to attain or maintain any ambient air quality standard or applicable prevention of significant deterioration (PSD) increment; or (3-15-02)

**b.** Specific emissions standards, or requirements on operation or maintenance are necessary to ensure compliance with any applicable emission standard or rule. (3-15-02)