

(5e) "Air pollution control permit" has the meaning given in s. 144.30 (3), Stats.

(5s) "Air quality control region" or "AQCR" means an area designated under 42 USC 7407 or s. NR 404.03 in which a plan to maintain or achieve air standards is implemented on a regional basis. Air quality control regions include both interstate and intrastate regions.

(6) "Air region" means an area such as an AQCR designated pursuant to federal or Wisconsin laws in which a program to maintain or achieve air standards is implemented on a regional basis.

(7) "Allocation of the available air resource" has the meaning designated in s. 144.30 (3m), Stats.

(8) "Allowable emission" has the meaning given in s. 144.30 (4), Stats.

(8m) "Alternate designated representative" means a responsible natural person, authorized by the owners and operators of an affected source and of all affected units at the source to act in lieu of the designated representative, as evidenced by a certificate of representation submitted in accordance with 40 CFR 72.22, who may act on behalf of the designated representative to represent and legally bind each owner and operator, as a matter of federal law, in matters pertaining to the acid rain program.

(9) "Alternative method" means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the department's satisfaction to produce, in specific cases, results adequate for the department's determination of compliance.

(10) "Ambient air" means the portion of the atmosphere external to buildings and to which the general public has access.

(11) "Ambient air increment" or "air increment" means the maximum allowable increase in concentration of an air contaminant above the base line concentration of the air contaminant.

(11q) "Applicable requirement" means all of the following as they apply to emissions units at a source, including requirements that have been promulgated or approved by EPA or the department through rulemaking at the time of permit issuance but for which compliance is required after the date of permit issuance:

(a) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking in 40 CFR part 52;

(b) Any term or condition of any construction permit issued pursuant to ch. NR 405, 406 or 408 or to regulations approved or promulgated by EPA through rulemaking under title I of the act (42 USC 7401 to 7515);

(c) Any standard or other requirement under section 111 of the act (42 USC 7411);

(d) Any standard or other requirement under section 112 of the act (42 USC 7412);

(e) Any standard or other requirement of the acid rain program;

(f) Any requirements established pursuant to section 504 (b) or section 114 (a) (3) of the act (42 USC 7661c (b) or 7414 (a) (3));

(g) Any standard or other requirement governing solid waste incineration, under section 129 of the act (42 USC 7429);

(h) Any standard or other requirement for consumer and commercial products, under section 183 (e) of the act (42 USC 7511b (e));

(i) Any standard or other requirement for tank vessels, under section 183 (f) of the act (42 USC 7511b (f));

(j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under title VI of the act (42 USC 7671 to 7671q), unless the administrator has determined that the requirements need not be contained in an operation permit;

(k) Any national ambient air quality standard or increment or visibility requirement under part C of title I of the act (42 USC 7470 to 7492); and

(l) Any emission limit or other requirement in ss. 144.30 to 144.426, Stats. or chs. NR 400 to 499.

(m) Any source-specific emission limitation established pursuant to ss. 144.30 to 144.426, Stats., or rules promulgated thereunder.

(12) "Approved" means approved by the department of natural resources.

(17) "Baseline concentration" has the meaning given in s. 144.30 (8), Stats.

(17m) "Basic emissions unit" means the smallest collection of equipment which in combination emits or is capable of emitting any air contaminant.

(17s) "Belt conveyor" means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

(18) "Best available control technology" has the meaning given in s. 144.30 (9), Stats.

(19) "Boiler" means any device with an enclosed combustion chamber in which fuel is burned to heat a liquid for the primary purpose of producing heat or power by indirect heat transfer.

(20) "Breakdown" means a sudden failure of emission control or emission monitoring equipment to function as a result of wear, failure to repair, breakage, unavoidable damage, or other unintentional causes.

(21c) "Bucket elevator" means a conveying device of materials consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

(21e) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives gasoline from bulk terminals, stores it in stationary storage tanks, and subsequently distributes it to gasoline dispensing facilities.

(21k) "Capacity" means, for purposes of nonmetallic mineral processing, the cumulative rated capacity of all initial crushers that are part of a processing plant.

(21m) "Capture efficiency" means the weight per unit time of an air contaminant entering a capture system and delivered to a control device divided by the weight per unit time of the air contaminant generated by the source, expressed as a percentage.

(22) "Capture system" means the equipment (including hoods, ducts, fans, etc.) used to contain, capture, or transport an air contaminant to a control device.

(22e) "Coal" means all solid fuels classified as anthracite, bituminous, subbituminous or lignite by ASTM designation D388-92, incorporated by reference in s. NR 484.10.

(22m) "Coal-derived fuel" means any fuel, whether in a solid, liquid or gaseous state, produced by the mechanical, thermal or chemical processing of coal, such as pulverized coal, coal refuse, liquified or gasified coal, washed coal, chemically cleaned coal, coal-oil mixtures and coke.

(23) "Commence construction" means to engage in a program of on-site construction, including a site clearance, grading, dredging or landfilling specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source.

(24) "Commence modification" means to engage in a program of on-site modification which may include site clearance, grading, dredging or landfilling in preparation for a specific modification of a stationary source.

(26) "Control device" means equipment used to destroy or remove air contaminants in a gas stream exiting a capture system prior to emission.

(26e) "Control efficiency" means the percentage by which a control device or technique reduces the emissions from a stationary source.

(26m) "Control system" means any number of control devices, including condensers, which are designed and operated to reduce the quantity of air contaminants emitted to the atmosphere.

(26s) "Crusher" means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: jaw, gyratory, cone, roll, rod mill, hammermill and impactor.

(27) "Day" means a 24-hour period beginning at midnight.

(28) "Department" means the department of natural resources, state of Wisconsin.

(28m) "Designated representative" means a responsible natural person authorized by the owners and operators of an effected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with 40 CFR 72.20 to 72.25, to represent and legally bind each owner and operator, as a matter of federal law, in matters pertaining to the acid rain program.

(29) "Direct source" means any stationary source which may directly result in the emission of any air contaminant at a fixed location (e.g.,

building demolition, foundry, grain elevator, gravel or stone quarry, paper mill, power plant, etc.).

(30) "Emergency electric generator" means an electric generator whose purpose is to provide electricity to a facility if normal electrical service is interrupted and which is operated no more than 200 hours per year.

(31) "Emission" means a release, whether directly or indirectly, of any air contaminant to the atmosphere.

(32) "Emission limitation" or "emission standard" has the meaning given in s. 144.30 (11), Stats.

(33) "Emission point" means any individual opening at a fixed location through which air contaminants are emitted.

(34) "Emission reduction option" has the meaning given in s. 144.30 (12), Stats.

(35) "Emissions unit" means any part of a stationary source which emits or is capable of emitting any air contaminant.

(38) "Equivalent method" means any method of sampling and analyzing for an air pollutant which has been demonstrated to the department's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

(39) "Facility" means an establishment—residential, commercial, institutional or industrial—which emits or causes emissions of air contaminants.

(39m) "Federally enforceable" means all limitations and conditions which are enforceable by the administrator of the U.S. environmental protection agency, including those requirements developed pursuant to chs. NR 440 and 446 to 449, and under sections 111 and 112 of the act (42 USC 7411 and 7412), requirements within any applicable state implementation plan, any permit requirements established pursuant to ch. NR 405, requirements in construction permits issued under ch. NR 406 or 408 and requirements in operation permits issued pursuant to ch. NR 407 and title V of the act which are designated as federally enforceable.

Note: Permit or state implementation plan limitations generally considered federally enforceable are limitations on the allowable capacity of the equipment, requirements for the installation, operation and maintenance of pollution control equipment, limits on hours of operation and restrictions on amounts of materials combusted, stored or produced. To be federally enforceable, restrictions on operation, production or emissions must reflect the shortest practicable time period, in no event for a period in excess of 30 days, and they must be tied to other enforceable operating restrictions at the source. General limitations on potential to emit, such as yearly limits in tons per year, by themselves, are not considered federally enforceable. The use of hourly, daily, weekly or monthly rolling averages are generally acceptable. Any federally enforceable limitations or conditions must be practically enforceable, ensure continuous compliance with the restrictions and include adequate testing, monitoring and recordkeeping procedures in an applicable federally issued permit, in a federally approved state implementation plan or in a permit issued under the state implementation plan.

(40) "Fixed capital cost" means the capital needed to provide all of the depreciable components of a stationary source.

(40e) "Fixed plant" means any nonmetallic mineral processing plant at which the processing equipment is attached or clamped by a cable, chain, turnbuckle, bolt or other means, except electrical connections, to any anchor, slab or structure including bedrock.

(40m) "Fossil fuel" means natural gas, petroleum, coal or any form of solid, liquid or gaseous fuel derived from such material.

(40s) "Fossil fuel-fired" means the combustion of fossil fuel or any derivative of fossil fuel, alone or in combination with any other fuel, without regard to the percentage of fossil fuel consumed in any calendar year.

(41) "Fuel" means any solid, liquid or gaseous materials used to produce useful heat by burning.

(41m) "Fuel oil" means any petroleum-based fuel, including diesel fuel or petroleum derivatives such as oil tar, as defined in ASTM D396-92, incorporated by reference in s. NR 484.10, and any recycled or blended petroleum products or petroleum by-products used as a fuel whether in a liquid, solid or gaseous state.

(42) "Fugitive emission" means an emission from any emission point within a facility other than a flue or stack.

(43) "Gasoline" means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater which is used as a fuel for internal combustion engines.

(43b) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(43e) "Heat input" means the total gross calorific value per unit of time of all fuels being burned, where gross calorific value of a fuel is measured by ASTM Method D240-92, D1826-88 or D2015-93, incorporated by reference in s. NR 484.10. Where the test method gives a higher and a lower heating value, heat input is calculated in Btu per hour using the higher heating value of the fuel.

(43m) "Highway" has the meaning given it in s. 340.01 (22), Stats.

(44) "Hour" means any 3,600 second period.

(45) "Implementation plan" means a plan adopted to implement, maintain and enforce air standards within the state, an air region, or a portion of the state or region.

(46) "Incinerator" means a combustion apparatus designed for high temperature operation in which solid, semisolid, liquid, or gaseous combustible wastes are ignited and burned to produce solid and gaseous residues containing little or no combustible material.

(46m) "Increase in the net amount of emissions" has the same meaning as the phrase "net emissions increase" which is defined in s. NR 405.02 (24).

(47) "Indirect source" means any stationary source which conveys motor vehicles or which attracts or may attract mobile source activity and thus indirectly causes the emission of any air contaminant. Such indirect sources include, but are not limited to highways and roads; parking facilities; retail, commercial and industrial facilities; recreation, amusement, sports and entertainment facilities; airports; office and government buildings; and educational facilities.

(47m) "Industrial sand mine" means any mine, pit or quarry to which the standard industrial classification (SIC) category number 1446 applies. The SIC category for a source is determined by reference to the

Standard Industrial Classification Manual, 1987, which is incorporated by reference in s. NR 484.05.

(48) "Intersection" has the meaning given in s. 340.01 (25), Stats.

(50) "Kraft pulp" means any pulp produced with an alkaline sulfide solution containing sodium hydroxide and sodium sulfide for a cooking liquor.

(51) "Laboratory" means a facility or portion of a multi-use facility which does not produce a product for regular commercial use or sale and which is used primarily for scientific or technical experimentation or observation of matter for the purpose of research, development, quality assurance, analysis or teaching.

(51m) "Ledge rock quarry" means any open pit to which the standard industrial classification (SIC) category number 1411, 1422, 1423, or 1429 applies where drilling and blasting is required to extract the nonmetallic mineral. The SIC category for a source is determined by reference to the Standard Industrial Classification Manual, 1987, which is incorporated by reference in s. NR 484.05.

(52) "Light-duty trucks" means any motor vehicles rated at 3864 kilograms (8500 pounds) gross weight or less which are designed primarily for the purpose of transporting goods and materials, or derivatives of such vehicles.

(53) "Lowest achievable emission rate" has the meaning given in s. 144.30 (15), Stats.

(53e) "Malfunction" means any sudden failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown are not malfunctions.

(53m) "Maximum theoretical emissions" means the quantity of air contaminants that theoretically could be emitted by a stationary source without control devices based on the design capacity or maximum production capacity of the source. When determining annual maximum theoretical emissions, a source shall be presumed to operate 8,760 hours per year unless its physical design precludes 8,760 hours of operation per year. Where a source's physical design restricts the number of hours it may operate, annual maximum theoretical emissions shall be calculated taking this restriction into account. In determining the maximum theoretical emissions of VOCs for a source, the design capacity or maximum production capacity shall include the use of raw materials, coatings and inks with the highest VOC content used in practice by the source. Realistic operating conditions shall be taken into account in determining emissions under this subsection.

(53s) "Minor source" means any stationary source which is not a major source.

(54) "Mobile source" means any motor vehicle or equipment other than a semistationary source which is capable of emitting any air contaminant while moving (e.g., automobile, bulldozer, bus, locomotive, motorboat, motorcycle, snowmobile, steamship, truck, etc.).

(80s) "Road" means the entire width between boundary lines of any way open to the public for vehicular travel.

(81) "Roadway" has the meaning given it in s. 340.01 (54), Stats.

(81e) "Rolling 12 month average" means, with reference to only ledge rock quarries and industrial sand mines, a monthly average calculated each month by adding the total actual production of the preceding 12 calendar months, and dividing the total by 12. If a new quarry has been in existence for less than 12 calendar months, then the average shall be calculated by adding the total actual production since initial operation, and dividing the total by the number of calendar months subsequent to and including the month of initial operation.

(81m) "Screening operation" means a device for separating material according to size by passing undersize material through one or more mesh surfaces, screens or similar surfaces in series, and retaining oversize material on the mesh surfaces, screens or similar surfaces. Screening operation includes any grizzly, rotating screen or deck type screen. Screening operation does not include washers that are designed to remove unwanted or unnecessary material from the product.

(83) "Secretary" means the secretary of the department of natural resources, state of Wisconsin.

(84) "Semistationary source" means any facility, operation or equipment that has the capability of emitting any air contaminant while moving, but generally does not emit while moving (e.g., diesel cranes, air compressors, and electric generators such as those used at construction sites, etc.).

(86) "Shutdown" means the cessation of operation of a direct or portable source or of emission control equipment.

(87) "Smoke" means all products of combustion of sufficient density to be observable, including but not limited to carbon, dust, fly ash, and other particles, but not including uncombined water.

(88) "Solvent" means organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

(89) "Stack" means any device or opening designed or used to emit air contaminants to the ambient air.

(90) "Standard conditions" means a temperature of 20°C (68°F) and a pressure of 760 millimeters of mercury (29.92 inches of mercury).

(91) "Standard industrial classification code" or "SIC code" means the series of codes which classify facilities according to the type of economic activity in which they are engaged, as described in the Standard Industrial Classification Manual, 1987, incorporated by reference in s. NR 484.05

(93) "Standard pressure" means a pressure of 760 millimeters of mercury (29.92 inches of mercury).

(94) "Standard temperature" means a temperature of 20°C (68°F).

(95) "Startup" means the setting in operation of a facility or its emission control equipment for any purpose which produces emissions.

(96) "Stationary source" has the meaning given in s. 144.30 (23), Stats.

(96m) "Storage bin" means a facility for storage, including surge bins, for nonmetallic minerals prior to further processing or loading.

(97) "Technological infeasibility" means incapable of being accomplished or carried out as a matter of practicality; i.e., technically impracticable rather than technically impossible.

(98) "Thermal evaporation unit" means any device which uses temperatures greater than the ambient temperature or 100° F, whichever is greater, to assist in evaporating organic compounds from soil or water.

(98g) "Threshold limit value" means the airborne concentration of substances, which represents exposure conditions under which it is believed that nearly all workers may be repeatedly exposed to day after day without adverse health effects.

(98m) "Total reduced sulfur" or "TRS" means the sum of any sulfur containing compounds in which the oxidation state of sulfur is less than zero.

Note: Common examples of such compounds are hydrogen sulfide, carbonyl sulfide, dimethyl sulfide, carbon disulfide, dimethyl disulfide and mercaptans.

(98s) "Transfer point" means a point in a conveying operation where a nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile from a belt conveyor.

(99) "Uncombined water" means water not chemically or physically bound to another materials.

(100) "Volatile organic compound" or "VOC" means any organic compound which participates in atmospheric photochemical reactions. This includes any such organic compound other than the following compounds, which have been determined to have negligible photochemical reactivity:

- (a) Methane,
- (b) Ethane,
- (c) Methylene chloride (Dichloromethane),
- (d) 1,1,1-Trichloroethane (Methyl chloroform),
- (e) Trichlorofluoromethane (CFC-11),
- (f) Dichlorodifluoromethane (CFC-12),
- (g) Chlorodifluoromethane (HCFC-22),
- (h) Trifluoromethane (HFC-23),
- (i) 1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113),
- (j) 1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC-114),
- (k) Chloropentafluoroethane (CFC-115),
- (l) 1,1,1-Trifluoro-2,2-dichloroethane (HCFC-123),



- (m) 2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124),
- (n) Pentafluoroethane (HFC-125),
- (o) 1,1,2,2-Tetrafluoroethane (HFC-134),
- (p) 1,1,1,2-Tetrafluoroethane (HFC-134a),
- (q) 1,1-Dichloro-1-fluoroethane (HCFC-141b),
- (r) 1-Chloro-1,1-difluoroethane (HCFC-142b),
- (s) 1,1,1-Trifluoroethane (HFC-143a),
- (t) 1,1-Difluoroethane (HFC-152a), and
- (u) Perfluorocarbon compounds which fall into the following classes:
  1. Cyclic, branched or linear completely fluorinated alkanes.
  2. Cyclic, branched or linear completely fluorinated ethers with no unsaturations.
  3. Cyclic, branched or linear completely fluorinated tertiary amines with no unsaturations, and
  4. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

**Note:** The test methods used to measure VOC are specified in s. NR 439.06 (3).

**History:** Cr. (7), (8), (17), (18), (32), (34), (53) and (60), (64) renum. from NR 404.01 (7), remainder renum. from NR 154.01 and am. (1), (2), (3), (94) and (96), Register, September, 1986, No. 369, eff. 10-1-86; cr. (46m), Register, January, 1987, No. 373, eff. 2-1-87; am. (66), Register, September, 1987, No. 381, eff. 10-1-87; emerg. am. (66), eff. 10-1-87; r. (14) and (91), cr. (47e), (55e) and (80s), am. (59) and (69), renum. (98) to be NR 406.02 (12); (5e), (17m), (43m), (46s), (53e) and (53s) renum. from NR 410.02 (1), NR 406.02 (3), (4) and (6) and NR 410.02 (4) and (5) and am. (46s), Register, April, 1988, No. 388, eff. 5-1-88; am. (66), renum. (77) to be NR 445.02(9m), cr. (66m), (69m) and (77), Register, December, 1988, No. 396, eff. 1-1-89; r. (1), (22), (25), (30), (43), (47), (48), (52), (73) and (85), am. (2), (3), (5e), (8), (17), (18), (32), (34), (40), (45), (53), (55), (60), (70), (77), (95), (96) and (100), (11m), (16e), (21e), (21m), (22), (26m), (51m) and (72) renum. from NR 420.02 (3), (4), (7), 422.02 (6), 421.02 (2), 420.02 (12), 421.02 (5) and 419.02 (5) renum. (36), (71) and (72) to be NR 422.02 (12s), 420.02 (29m) and 420.02 (29p), Register, February, 1990, No. 410, eff. 3-1-90; (4m) and (43) renum. from NR 440.02 (4) and 440.64 (2) (d), Register, September, 1990, No. 417, eff. 10-1-90; am. (4), (26), (31), (66) and (80), cr. (78m) and (98), renum. (16) to be NR 406.02 (1), Register, August, 1991, No. 428, eff. 9-1-91; am. (50), r. (13), (5s), (60m), (80m) and (98m), renum. from NR 404.02 (1), NR 415.02 (4) and (7), NR 429.02 (2) and am., renum. (46s), (47e) and (51m) to be (47), (48) and (52), (37), (82), (92) and (101) to be NR 417.02 (1), 449.02 (10m), (11m) and (18), Register, May, 1992, No. 437, eff. 6-1-92; emerg. am. (55), eff. 11-15-92; (39m) renum. from NR 405.02 (14) and am. cr. (43e) and (53m), r. (53e), r. and recr. (55), am. (100), Register, May, 1993, No. 449, eff. 6-1-93; cr. (1), (1j), (26e) and (91), (59m) renum. from NR 101.03 (13) and am., Register, June, 1993, No. 450, eff. 7-1-93; cr. (1b), (1e), (1m), (1q), (8m), (11q), (28m), (30), (36), (43b), (53e), (68m), (71) and (80e), am. (53m), Register, December, 1993, No. 456, eff. 1-1-94; cr. (1k), (1l), (17s), (21c), (21k), (26s), (40e), (47m), (51m), (60e), (60i), (69s), (81m), (96m) and (98s), Register, June, 1994, No. 462, eff. 7-1-94; cr. (98g), Register, December, 1994, No. 468, eff. 1-1-95; am. (43e), (47m), (51m), (77), (80) and (91), Register, February, 1995, No. 470, eff. 3-1-95; renum. (1) to (1a), renum. (1), (1c), (1v) from NR 407.02 (1), (2), (4), am. (1b), (1q), (39m), r. (11m), (15), (16e), (21), (36), (49), (74), cr. (22e), (22m), (40m), (40s), (41m), (57m), Register, April, 1995, No. 472, eff. 5-1-95.

**NR 400.03 Units and abbreviations.** Abbreviations and symbols of units of measure used in chs. NR 400 to 499 are defined as follows:

- (1) System international (SI) units of measure:

A - ampere

g - gram

Hz - hertz

J -joule

K - degree Kelvin

kg - kilogram

kPa - kilo pascal (1.0 kPa = 0.15 psia)

m - meter

m<sup>2</sup> - square meter

m<sup>3</sup> - cubic meter

mg - milligram—10<sup>-3</sup> gram

Mg - megagram—10<sup>6</sup> gram

mm - millimeter—10<sup>-3</sup> meter

mol - mole

MW - megawatt

MWe - megawatt electrical

N - newton

ng -nanogram—10<sup>-9</sup> gram

nm - nanometer—10<sup>-9</sup> meter

Pa - pascal

s - second

V - volt

W - watt

μg - microgram—10<sup>-6</sup> gram

Ω - ohm

(2) Other units of measure:

Btu or BTU - British thermal unit

°C - degree Celsius (centigrade)

cc - cubic centimeters

cfm - cubic feet per minute

Ci - curie

d - day

dcf - dry cubic feet

dcm - dry cubic meters

dscf - dry cubic feet at standard conditions