

**567-22.1(455B) Definitions and permits requirements for new or existing stationary sources.**

For the purpose of these rules and the rules in 567- Chapters 20 through 35, the following terms shall, unless otherwise noted, have the meaning indicated in this chapter. Additional definitions potentially applicable to this chapter are set forth in 567- Chapters 21 and 23. The definitions set out in Iowa Code sections 455B.101, 455B.131, and 455B.411 are incorporated verbatim in these rules.

*"12-month rolling period"* means a period of 12 consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month.

*"Act"* means the Clean Air Act (42 U.S.C. Section 7401, et seq.), as amended through November 15, 1990.

*"Air quality standard"* means an allowable level of air contaminant or atmospheric air concentration established by the commission.

*"Ambient air"* means that portion of the atmosphere, external to buildings, to which the general public has access.

*"Biodiesel fuel"* means a renewable, biodegradable, mono alkyl ester combustible liquid fuel derived from agricultural plant oils or animal fat, such as but not limited to soybean oil. For purposes of this definition, "biodiesel fuel" must also meet the specifications of American Society for Testing and Material Specifications (ASTM) D 6751-02, "Standard Specification for Biodiesel Fuel (B100) Blend Stock for Distillate Fuels," and be registered with the U.S. Environmental Protection Agency as a fuel and a fuel additive under Section 211(b) of the Act.

*"Chimney"* or *"stack"* means any flue, conduit or duct permitting the discharge or passage of air contaminants into the open air or constructed or arranged for this purpose.

*"Combustion for indirect heating"* means the combustion of fuel to produce usable heat that is to be transferred through a heat-conducting materials barrier or by a heat storage medium to a material to be heated so that the material being heated is not contacted by, and adds no substance to, the products of combustion.

*"Control equipment"* means any equipment that has the function to prevent the formation of or the emission to the atmosphere of air contaminants from any fuel burning, incinerator or process equipment.

*"Country grain elevator"* means the same as defined in 22.10(1).

*"Diesel fuel"* means a low sulfur fuel oil that complies with the specifications for grade 1-D or 2-D, as defined by the ASTM D 975-02, "Standard Specification for Diesel Fuel Oils," grade 1-GT or 2-GT, as defined by ASTM D 2880-00, "Standard Specification for Gas Turbine Fuel Oils," or grade 1 or 2, as defined by ASTM D 396-02, "Standard Specification for Fuel Oils."

1. For purposes of the air quality rules contained in Title II, and unless otherwise specified, diesel fuel may contain a blend of up to 2.0 percent biodiesel fuel, by volume, as "biodiesel fuel" is defined in this rule.
2. The department shall consider air pollutant emissions calculations for the biodiesel fuel blends specified in paragraph "1" to be equivalent to the air pollutant emissions calculations for unblended diesel fuel.
3. Construction permits or operating permits issued under 567-Chapter 22 that restrict equipment fuel use to diesel fuel shall be considered by the department to include the biodiesel fuel blends specified in paragraph "1," unless otherwise specified or in a permit issued under this chapter.

*"Electric furnace"* means a furnace in which the melting and refining of metals are accomplished by means of electrical energy.

*"Electronic format," "electronic submittal," or "electronic submittal format,"* for purposes of 567-Chapters 20 through 35, means a software, Internet-based, or other electronic means specified by the department for submitting air quality information or fees to the department related to but not limited to applications, certifications, determination requests, emissions inventories, forms, notifications, payments, permit applications and registrations. References to these information submittal methods in 567-Chapters 20 through 35 may, as specified by the department, include electronic submittal as stated in the applicable rules.

*"Emergency generator"* means any generator of which the sole function is to provide emergency backup power during an interruption of electrical power from the electric utility. An emergency is an unforeseeable condition that is beyond the control of the owner or operator. An emergency generator does not include:

1. Peaking units at electric utilities.
2. Generators at industrial facilities that typically operate at low rates but are not confined to emergency purposes.

3. Any standby generators that are used during time periods when power is available from the electric utility.

*"Emission limitation"* or *"emission standard"* means a requirement established by a state, local government, or the administrator that limits the quantity, rate or concentration of emissions of air pollutants on a continuous basis, including any requirements that limit the level of opacity, prescribe equipment, set fuel specifications or prescribe operation or maintenance procedures for a source to ensure continuous emission reduction.

*"EPA conditioned method"* means any method of sampling and analyzing for air pollutants that has been validated by the administrator but that has not been published as an EPA reference method.

*"EPA reference method"* means the following methods used for performance tests and continuous monitoring systems:

1. Performance test (stack test). A stack test shall be conducted according to EPA reference methods specified in 40 CFR 51, Appendix M (as amended or corrected through March 29, 2023); 40 CFR 60, Appendix A (as amended or corrected through March 29, 2023); 40 CFR 61, Appendix B (as amended or corrected through October 7, 2020); and 40 CFR 63, Appendix A (as amended or corrected through March 29, 2023).
2. Continuous monitoring systems. Minimum performance specifications and quality assurance procedures for performance evaluations of continuous monitoring systems are as specified in 40 CFR 60, Appendix B (as amended or corrected through June 28, 2023); 40 CFR 60, Appendix F (as amended or corrected through March 29, 2023); 40 CFR 75, Appendix A (as amended or corrected through August 30, 2016); 40 CFR 75, Appendix B (as amended or corrected through August 30, 2016); and 40 CFR 75, Appendix F (as amended or corrected through August 30, 2016).

*"Equipment"* means the same as defined in 567-21.1(455B).

*"Excess air"* means that amount of air supplied in addition to the theoretical quantity necessary for complete combustion of all fuel or combustible waste material present.

*"Existing equipment"* means the same as defined in 567-21.1(455B).

*"Foundry cupola"* means a stack-type furnace used for melting of metals consisting of but not limited to the furnace proper, tuyeres, fans or blowers, tapping spout, charging equipment, gas cleaning

devices and other auxiliaries.

"*Fugitive dust*" means any airborne solid particulate matter emitted from any source other than a flue or stack.

"*Grain processing*" means the equipment, or the combination of different types of equipment, used in the processing of grain to produce a product primarily for wholesale or retail sale for human or animal consumption, including the processing of grain for production of biofuels, except for "feed mill equipment" as defined in 567-22.10(455B).

"*Grain storage elevator*" means any plan or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded and that is located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plan that has a permanent grain storage capacity (grain storage capacity that is inside a building, bin, or silo) of more than 35,200 m<sup>3</sup> (ca. 1 million U.S. bushels).

"*Greenhouse gas*" means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

"*Heating value*" means the heat released by combustion of one pound of waste or fuel measured in Btu on an as-received basis. For solid fuels, the heating value shall be determined by use of ASTM Standard D 2015-66.

"*Incinerator*" means a combustion apparatus designed for high temperature operation in which solid, semisolid, liquid or gaseous combustible refuse is ignited and burned efficiently and from which the solid residues contain little or no combustible material.

"*Initiation of construction, installation or alteration*" means significant modification of a site to install equipment, control equipment or permanent structures. Not included are activities incident to preliminary engineering, environmental studies, or acquisition of a site for a facility.

"*New equipment*" means the same as defined in 567-21.1(455B).

"*Number 1 fuel oil*" and "*number 2 fuel oil*," also known as "distillate oil," mean fuel oil that complies with the specifications for fuel oil number 1 or fuel oil number 2, as defined by the ASTM D 396-02, "Standard Specification for Fuel Oils."

1. For purposed of the air quality rules contained in Title II, and unless otherwise specified, number 1 fuel oil or number 2 fuel

oil may contain a blend of up to 2.0 percent biodiesel fuel, by volume, as "biodiesel fuel" is defined in this rule.

2. The department shall consider air pollutant emissions calculations for the biodiesel fuel blends specified in paragraph "1" to be equivalent to the air pollutant emissions calculations for unblended number 1 fuel oil or unblended number 2 fuel oil.
3. Construction permits or operating permits issued under this chapter that restrict equipment fuel use to number 1 fuel oil or number 2 fuel oil shall be considered by the department to include the biodiesel fuel blends specified in paragraph "1," unless otherwise specified or in a permit issued under this chapter.

"*One-hour period*" means any 60-minute period commencing on the hour.

"*Particulate matter*" (except for the purposes of new source performance standards as defined in 40 CFR 60) means any material, except uncombined water, that exists in a finely divided form as a liquid or solid at standard conditions and includes gaseous emissions that condense to liquid or solid form as measured by EPA-approved reference methods.

"*Plan documents*" means the reports, proposals, preliminary plans, survey and basis of design data, general and detail construction plans, profiles, specifications and all other information pertaining to equipment.

"*PM<sub>10</sub>*" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measures by an EPA-approved reference method.

"*PM<sub>2.5</sub>*" means particulate matter as defined in this rule with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measures by an EPA-approved reference method.

"*Potential to emit*" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a 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 is enforceable by the administrator. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in

Title IV of the Act or the regulations relating to acid rain.

For the purpose of determining potential to emit for country grain elevators, the provisions set forth in 22.10(2) shall apply.

For the purpose of calculating potential to emit for emergency generators, "maximum capacity" means one of the following:

1. 500 hours of operation annually, if the generator has actually been operated less than 500 hours per year for the past five years.
2. 8,760 hours of operation annually, if the generator has actually been operated more than 500 hours in one of the past five years.
3. The number of hours specified in a state or federally enforceable limit.

If the source is subject to new source construction permit review, then potential to emit is defined as stated above or as established in a federally enforceable permit.

"*Privileged communication*" means information other than air pollutant emissions data, the release of which tend to affect adversely the competitive position of the owner or operator of the equipment.

"*Process*" means any action, operation or treatment, and all methods and forms of manufacturing or processing, that may emit smoke, particulate matter, gaseous matter or other air contaminant.

"*Process weight*" means the total weight of all materials introduced into any source operation. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not.

"*Process weight rate*" means 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; or for a cyclical or batch source operation, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the number of hours 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 interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

"*Six-minute period*" means any one of the ten equal parts of a one-

hour period.

"*Smoke*" means gas-borne particles resulting from incomplete combustion, consisting predominately, but not exclusively, of carbon, and other combustible material, or ash, that form a visible plume in the air.

"*Source operation*" means the last operation preceding the emission of an air contaminant and that results in the separation of the air contaminant from the process materials or in the conversion of the process materials into air contaminants but is not an air pollution control operation.

"*Standard conditions*" means a temperature of 68°F and a pressure of 29.92 inches of mercury absolute.

"*Standard cubic foot*" or "*SCF*" means the volume of one cubic foot of gas at standard conditions.

"*Standard metropolitan statistical area*" or "*SMSA*" means an area that has at least one city with a population of at least 50,000 and such surrounding areas as geographically defined by the U.S. Office of Management and Budget (Department of Commerce).

"*Stationary source*" means any building, structure, facility, or installation that emits or may emit any air pollutant.

"*Total suspended particulate*" means particulate matter as defined in this rule.

"*Untreated*" as it refers to wood or wood products includes only wood or wood products that have not been treated with compounds such as, but not limited to, paint, pigment-stain, adhesive, varnish, lacquer, or resin or that have not been pressure treated with compounds such as, but not limited to, chromate copper acetate, pentachlorophenol or cresote. "Untreated" as it refers to seeds, pellets or other vegetative matter includes only seeds, pellets or other vegetative matter than has not been treated with pesticides or fungicides.

"*Urban area*" means any Iowa city of 100,000 or more population in the current census and all Iowa cities contiguous to such city.

"*Variance*" means a temporary waiver from rules or standards governing the quality, nature, duration or extent of emissions granted by the commission for a specified period of time.

"*Volatile organic compounds*" or "*VOC*" means any compound included in

the definition of "volatile organic compounds" found at 40 CFR Section 51.100(s) as amended through February 8, 2023.

**22.1(1) Permit required.** No person shall construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon unless a permit is first obtained pursuant to this chapter, 567-31.3(455B), or 567-33.3(455B), or the equipment qualifies for an exemption under 22.1(2). An air quality construction permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon, unless the parameters in 22.1(1)"c" are met.

a. Existing equipment is not subject to this subrule, unless it has been modified, reconstructed, or altered on or after September 23, 1970.

b. No person shall construct or reconstruct a major source of hazardous air pollutants, as defined in 40 CFR Section 63.2 and 40 CFR Section 63.41 as adopted by reference in 567-subrule 23.1(4), unless a construction permit has been obtained from the department, which requires maximum achievable control technology for new sources to be applied. The permit shall be obtained prior to the initiation of construction or reconstruction of the major source.

c. Construction prior to issuance of an air quality construction permit issued by the department may begin if the eligibility requirements stated in 22.1(1)"c"(1) are met. The applicant must assume any liability for construction conducted on a source before the permit is issued. In no case will the applicant be allowed to hook up the equipment to the exhaust stack or operate the equipment in any way that may emit any pollutant prior to receiving a construction permit.

(1) Eligibility.

1. The applicant has submitted a construction permit application to the department, as specified in subrule 22.1(3);

2. The applicant has notified the department of the applicant's intentions in writing five working days prior to initiating construction; and

3. The equipment or process is not subject to:

- Prevention of significant deterioration (PSD), as set forth in 567-Chapter 33;
- New source performance standards (NSPS), as set forth in 567-subrule 23.1(2);

- National emission standards for hazardous air pollutants (NESHAP), as set forth in 567-subrules 23.1(3) and 23.1(4);
- Emission guidelines, as set forth in 567-subrule 23.1(5);
- Nonattainment new source review, as set forth in 567-Chapter 31; or
- The equipment or process is a major source of hazardous air pollutants, as defined in 40 CFR Sections 63.2 and 63.41, and as adopted by reference in 567-subrule 23.1(4).

The equipment and processes are subject to PSD until the owner or operator of a proposed project legally obtains permitted limits that limit the project below the PSD thresholds (i.e., PSD synthetic minor status).

(2) The applicant must cease construction if the department's evaluation demonstrates that the construction, reconstruction or modification of the stationary source will interfere with the attainment or maintenance of the national ambient air quality standards or will result in a violation of a control strategy required by 40 CFR Part 51, Subpart G, as amended through February 19, 2015.

(3) The applicant will be required to make any modification to the stationary source that may be imposed in the issued construction permit.

(4) The applicant must notify the department in writing of the actual start date of construction or reconstruction. All notifications shall be submitted to the department in writing no later than 30 days after construction or reconstruction started. All notifications shall include all of the information listed in 22.3(3) "b."

d. The owner or operator of a country grain elevator, country grain terminal elevator, grain terminal elevator or feed mill equipment, as "country grain elevator," "country grain terminal elevator," "grain terminal elevator," and "feed mill equipment" are defined in 22.10(1), may elect to comply with the requirements specified in rule 567-22.10(455B) as an alternative to the construction permitting requirements set forth in 22.1(1).

**22.1(2) Exemptions.** An owner or operator may opt to use one of the permitting exemptions in this subrule in lieu of obtaining an air quality construction permit if the equipment, control equipment, or process meets the conditions in the specific exemption and is not:

- Permitted under the provisions of the permit by rule for spray

booths, as set forth in 567-22.8(455B);

- Subject to nonattainment new source review, as set forth in 567-Chapter 31; or
- Subject to PSD, as set forth in 567-Chapter 33;

A permitting exemption may be used only if a permit is not necessary to establish federally enforceable limits that restrict potential to emit.

An owner or operator shall keep records at the facility and will make the records available to the department upon request if any of the exemptions under the following paragraphs are claimed:

- 22.1(2)"a" (for equipment >1 million Btu per hour input),
- 22.1(2)"b,"
- 22.1(2)"e,"
- 22.1(2)"r," or
- 22.1(2)"s."

Records kept on site shall contain the following information:

- The specific exemption claimed; and
- A description of the associated equipment.

The permitting exemptions in this subrule do not relieve the owner or operator of any source from any obligation to comply with any other applicable requirements.

a. Fuel-burning equipment for indirect heating and reheating furnaces or cooling units using natural gas or liquefied petroleum gas with a capacity of less than 10 million Btu per hour input per combustion unit.

b. Fuel-burning equipment for indirect heating or indirect cooling with a capacity of less than 1 million Btu per hour input per combustion unit when burning untreated wood, untreated seeds or pellets, other untreated vegetative materials, or fuel oil, provided that the equipment and the fuel meet the conditions specified in this paragraph. Used oils meeting the specification from 40 CFR 279.11 as amended through July 14, 2006, are acceptable fuels for this exemption. When combusting used oils, the equipment must have a maximum rated capacity of 50,000 Btu or less per hour of heat input or a maximum throughput of 3,600 gallons or less of used oils per year. When combusting untreated wood, untreated seeds or pellets, or other untreated vegetative materials, the equipment must have a maximum rated capacity of 265,600 Btu or less per hour or a maximum throughput of 378,000 pounds or less per year of each fuel or any

combination of fuels. Records shall be maintained on site by the owner or operator for at least two calendar years to demonstrate that fuel usage is less than the exemption thresholds. Owners or operators initiating construction, installation, reconstruction, or alteration of equipment (as defined in rule 567-22.1(455B)) on or before October 23, 2013, burning coal, used oils, untreated wood, untreated seeds or pellets, or other untreated vegetative materials that qualified for this exemption may continue to claim this exemption after October 23, 2013, without being restricted to the maximum heat input or throughput specified in this paragraph.

c. Mobile internal combustion and jet engines, marine vessels and locomotives.

d. Equipment used for cultivating land, harvesting crops, or raising livestock other than anaerobic lagoons. This exemption is not applicable if the equipment is used to remove substances from grain which were applied to the grain by another person. This exemption is also not applicable to equipment used by a person to manufacture commercial feed, as defined in Iowa Code section 198.3, which is normally not fed to livestock, owned by the person or another person, in a feedlot, as defined in Iowa Code section 172D.1(6), or a confinement building owned or operated by that person and located in this state.

e. Incinerators and pyrolysis cleaning furnaces with a rated refuse burning capacity of less than 25 pounds per hour for which initiation of construction, installation, reconstruction, or alteration (as defined in rule 567-22.1(455B)) occurred on or before October 23, 2013. Pyrolysis cleaning furnace exemption is limited to those units that use only natural gas or propane. Salt bath units are not included in this exemption. Incinerators or pyrolysis cleaning furnaces for which initiation of construction, installation, reconstruction, or alteration (as defined in rule 567-21.1(455B)) occurred after October 23, 2013, shall not qualify for this exemption. After October 23, 2013, only paint clean-off ovens with a maximum rated capacity of less than 25 pounds per hour that do not combust lead-containing materials shall qualify for this exemption.

f. Fugitive dust controls, unless a control efficiency can be assigned to the equipment or control equipment.

g. Equipment or control equipment that reduces or eliminates all emission to the atmosphere. An owner or operator electing to use this exemption shall provide to the department the following information:

- (1) Name and location of the facility;

(2) A detailed description of each change being made;

(3) Date for beginning actual construction and date that operation will begin after the changes are made;

(4) Detailed emissions estimates showing:

1. The actual and potential emissions, specifically noting increased or decreases, for the project for all regulated pollutants (as defined in 567-24.100(455B)); and

2. The accumulated emissions increases associated with each change when totaled with other net emissions increases at the facility contemporaneous with the proposed change (occurring within five years before construction of the particular change commences).

(5) Documentation of the basis for all emissions estimates;

(6) Height of the emission point or stack and the height of the highest building within 50 feet;

(7) Statement that the provisions of 567-Chapters 31 and 33 do not apply; and

(8) The written statement containing certification by a responsible official as defined in rule 567-24.100(455B) of truth, accuracy, and completeness that:

1. Accumulated emissions with other contemporaneous net increases have not exceeded significant levels, as defined in 40 CFR 52.21(b)(23), and adopted in 567-33.3(455B);

2. The changes will not prevent the attainment or maintenance of the ambient air quality standards specified in 567-22.11(455B);

3. Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

The conditions listed below also apply to this exemption:

- If an owner or operator opts to use this exemption for equipment or a process not yet constructed or modified, the information shall be provided to the department at least 30 days in advance of the beginning of construction on the project.
- If an owner or operator opts to use this exemption for equipment

or a process that has already been constructed or modified and that does not have a construction permit for that construction or modification, the owner or operator shall not operate until the information listed above is provided to the department.

- If a construction permit has been previously issued for the equipment or control equipment, all other conditions of the construction permit remain in effect.
- If an owner or operator wishes to obtain credit for emission reductions, an air quality construction permit must be obtained for the reduction prior to the time the reduction is made.

*h.* Equipment (other than anaerobic lagoons) or control equipment which emits odors, unless such equipment or control equipment also emits particulate matter or any other regulated air contaminant (as defined in rule 567-24.100(455B)).

*i.* Reserved.

*j.* Residential heaters, cookstoves, or fireplaces that burn untreated wood, untreated seeds or pellets, or other untreated vegetative materials.

*k.* Asbestos demolition and renovation projects subject to 40 CFR 61.145 as adopted by reference in 567-subrule 23.1(3).

*l.* The equipment in laboratories used exclusively for nonproduction chemical and physical analyses. Nonproduction analyses means analyses incidental to the production of a good or service and includes analyses conducted for quality assurance or quality control activities, or for the assessment of environmental impact.

*m.* Storage tanks with a capacity of less than 19,812 gallons and an annual throughput of less than 200,000 gallons.

*n.* Stack or vents to prevent escape of sewer gases through plumbing traps. Systems which include any industrial waste are not exempt.

*o.* A nonproduction surface coating process that uses only handheld aerosol spray cans.

*p.* Brazing, soldering or welding equipment or portable cutting torches used only for nonproduction activities.

*q.* Cooling and ventilating equipment: comfort air conditioning

not designed or used to remove air contaminants generated by, or released from, specific units of equipment.

r. An internal combustion engine with a brake horsepower rating of less than 400 measured at the shaft, provided that the owner or operator meets all of the conditions in this paragraph. For the purposes of this exemption, the manufacturer's nameplate rated capacity at full load shall be defined as the brake horsepower output at the shaft. The owner or operator of an engine that was manufactured, ordered, modified or reconstructed after March 18, 2009, may use this exemption only if the owner or operator, prior to installing, modifying or reconstructing the engine, submits to the department a completed registration on forms provided by the department (unless the engine is exempted from registration, as specified in this paragraph or on the registration form), certifying that the engine is in compliance with the following federal regulations:

(1) NSPS for stationary compression ignition internal combustion engines (40 CFR Part 60, Subpart IIII); or

(2) NSPS for stationary spark ignition internal combustion engines (40 CFR Part 60, Subpart JJJJ); and

(3) NESHAP for reciprocating internal combustion engines (40 CFR Part 63, Subpart ZZZZ).

Use of this exemption does not relieve an owner or operator from any obligation to comply with NSPS or NESHAP requirements. An engine that meets the definition of a nonroad engine as specified in 40 CFR 1068.30, as amended through January 24, 2023, is exempt from the registration requirements of this paragraph.

s. Equipment that is not related to the production of goods or services and used exclusively for academic purposes, located at educational institutions (as defined in Iowa Code section 455B.161). The equipment covered under this exemption is limited to lab hoods, art class equipment, wood shop equipment in classrooms, wood fired pottery kilns, and fuel-burning units with a capacity of less than 1 million Btu per hour fuel capacity. This exemption does not apply to incinerators.

t. Any container, storage tank, or vessel that contains a fluid having a maximum true vapor pressure of less than 0.75 psia. "Maximum true vapor pressure" means the equilibrium partial pressure of the material considering:

(1) For material stored at ambient temperature, the maximum

monthly average temperature as reported by the National Weather Service, or

(2) For material stored above or below the ambient temperature, the temperature equal to the highest calendar-month average of the material storage temperature.

u. Equipment for carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, sandblast cleaning, shot blasting, shot peening, or polishing ceramic artwork, leather, metals (other than beryllium), plastics, concrete, rubber, paper stock, and wood or wood products, where such equipment is either used for nonproduction activities or exhausted inside a building.

v. Manually operated equipment, as defined in 567-24.100(455B), used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, scarfing, surface grinding, or turning.

w. Small unit exemption.

(1) "Small unit" means any emission unit and associated control (if applicable) that emits less than the following:

1. 2 pounds per year of lead and lead compounds expressed as lead (40 pounds per year of lead or lead compounds for equipment for which initiation of construction, installation, reconstruction, or alteration (as defined in 567-22.1(455B)) occurred on or before October 23, 2013);

2. 5 tons per year of sulfur dioxide;

3. 5 tons per year of nitrogen oxides;

4. 5 tons per year of volatile organic compounds;

5. 5 tons per year of carbon monoxide;

6. 5 tons per year of particulate matter (particulate matter as defined in 40 CFR Part 51.100(pp), as amended through November 7, 1986);

7. 2.5 tons per year of PM<sub>10</sub>;

8. 0.52 tons per year of PM<sub>2.5</sub> (does not apply to equipment for which initiation of construction, installation, reconstruction, or alteration (as defined in 567-22.1(455B)) occurred on or before

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October 23, 2013); and

9. 5 tons per year of hazardous air pollutants (as defined in 567-24.100(455B)).

For the purposes of this exemption, "emission unit" means any part or activity of a stationary source that emits or has the potential to emit any pollutant subject to regulation under the Act. This exemption applies to existing and new or modified "small units."

An emission unit that emits hazardous air pollutants (as defined in rule 567-24.100(455B)) is not eligible for this exemption if the emission unit is required to be reviewed for compliance with 567-subrule 23.1(3), emission standards for hazardous air pollutants (40 CFR Part 61, NESHAP), or 567-subrule 23.1(4), emission standards for hazardous air pollutants for source categories (40 CFR Part 63, NESHAP).

An emission unit that emits air pollutants that are not regulated air pollutants as defined in 567-24.100(455B) shall not be eligible to use this exemption.

(2) Permit requested. If a construction permit is requested in writing by the owner or operator of a small unit, the director may issue a construction permit for the emission point associated with that emission unit.

(3) An owner or operator that utilizes the small unit exemption must maintain on site an "exemption justification document." The exemption justification document must document conformance and compliance with the emission rate limits contained in the definition of "small unit" for the particular emission unit or group of similar emission units obtaining the exemption. Controls which may be part of the exemption justification document include, but are not limited to, the following: emission control devices, such as cyclones, filters, or baghouses; restricted hours of operation or fuel; and raw material or solvent substitution. The exemption justification document for an emission unit or group of similar emission units must be made available for review during normal business hours and for state or EPA on-site inspections and shall be provided to the director or the director's representative upon request. If an exemption justification document does not exist, the applicability of the small unit exemption is voided for that particular emission unit or group of similar emission units. The controls described in the exemption justification document establish a limit on the potential emissions. An exemption justification document shall include the following for each applicable emission unit or group of similar emission units:

1. A narrative description of how the emissions from the emission unit or group of similar emission units were determined and maintained at or below the annual small unit exemption levels.

2. If air pollution control equipment is used, a description of the air pollution control equipment used on the emission unit or group of similar emission units and a statement that the emission unit or group of similar emission units will not be operated without the pollution control equipment operating.

3. If air pollution control equipment is used, the applicant shall maintain a copy of any report of manufacturer's testing results of any emissions test, if available. The department may require a test if it believes that a test is necessary for the exemption claim.

4. A description of all production limits required for the emission unit or group of similar emission units to comply with the exemption levels.

5. Detailed calculations of emissions reflecting the use of any air pollution control devices or production or throughput limitations, or both, for applicable emission unit or group of similar emission units.

6. Records of actual operation that demonstrate that the annual emissions from the emission unit or group of similar emission units were maintained below the exemption levels.

7. Facilities designated as major sources with respect to 567-22.4(455B) and 567-24.101(455B), or subject to any applicable federal requirements, shall retain all records demonstrating compliance with the exemption justification document for five years. The record retention requirements supersede any retention conditions of an individual exemption.

8. A certification from the responsible official that the emission unit or group of similar emission units have complied with the exemption levels specified in 22.1(2)"w"(1).

(4) Requirement to apply for a construction permit. An owner or operator of a small unit will be required to obtain a construction permit or take the unit out of service if the emission unit exceeds the small unit emission levels.

1. If, during an inspection or other investigation of a facility, the department believes that the emission unit exceeds the emission levels that define a "small unit," then the department will

submit calculations and detailed information in a letter to the owner or operator. The owner or operator shall have 60 days to respond with detailed calculations and information to substantiate a claim that the small unit does not exceed the emission levels that define a small unit.

2. If the owner or operator is unable to substantiate a claim to the satisfaction of the department, then the owner or operator that has been using the small unit exemption must cease operation of that small unit or apply for a construction permit for that unit within 90 days after receiving a letter of notice from the department. The emission unit and control equipment may continue operation during this period and the associated initial application review period.

3. If the notification of nonqualification as a small unit is made by the department following the process described above, the owner or operator will be deemed to have constructed an emission unit without the required permit and may be subject to applicable penalties.

(5) Required notice for construction or modification of a substantial small unit. The owner or operator shall notify the department in writing at least ten days prior to commencing construction of any new or modified "substantial small unit" as defined in 22.1(2) "w"(6). The owner or operator shall notify the department within 30 days after determining an existing small unit meets the criteria of the "substantial small unit" as defined in 22.1(2) "w"(6). Notification shall include the name of the business, the location where the unit will be installed, and information describing the unit and quantifying its emissions. The owner or operator shall notify the department within 90 days of the end of the calendar year for which the aggregate emissions from substantial small units at the facility have reached any of the cumulative notice thresholds listed below.

(6) For the purposes of this paragraph, "substantial small unit" means a small unit which emits more than the following amounts, as documented in the exemption justification document:

1. 2 pounds per year of lead and lead compounds expressed as lead (30 pounds per year of lead or lead compounds for equipment for which initiation of construction, installation, reconstruction, or alteration (as defined in 567-22.1(455B)) occurred on or before October 23, 2013);

2. 3.75 tons per year of sulfur dioxide;

3. 3.75 tons per year of nitrogen oxides;

4. 3.75 tons per year of volatile organic compounds;

5. 3.75 tons per year of carbon monoxide;

6. 3.75 tons per year of particulate matter (particulate matter as defined in 40 CFR Part 51.100(pp), as amended through November 7, 1986);

7. 1.875 tons per year of  $PM_{10}$ ;

8. 0.4 tons per year of  $PM_{2.5}$  (does not apply to equipment for which initiation of construction, installation, reconstruction, or alteration (as defined in 567-22.1(455B)) occurred on or before October 23, 2013); or

9. 3.75 tons per year of any hazardous air pollutant or 3.75 tons per year of any combination of hazardous air pollutants.

An emission unit is a "substantial small unit" only for those substances for which annual emissions exceed the above-indicated amounts.

(7) Required notice that a cumulative notice threshold has been reached. Once a "cumulative notice threshold," as defined in 22.1(2) "w"(8), has been reached for any of the listed pollutants, the owner or operator at the facility must apply for air construction permits for all substantial small units for which the cumulative notice threshold for the pollutant(s) in question has been reached. The owner or operator shall have 90 days from the date it determines that the cumulative notice threshold has been reached in which to apply for construction permit(s). The owner or operator shall submit a letter to the department, within five working days of making this determination, establishing the date the owner or operator determined that the cumulative notice threshold had been reached.

(8) "Cumulative notice threshold" means the total combined emissions from all substantial small units using the small unit exemption which emit at the facility the following amounts, as documented in the exemption justification document:

1. 0.6 tons per year of lead and lead compounds expressed as lead;

2. 40 tons per year of sulfur dioxide;

3. 40 tons per year of nitrogen oxides;

4. 40 tons per year of volatile organic compounds;

5. 100 tons per year of carbon monoxide;

6. 25 tons per year of particulate matter (particulate matter as defined in 40 CFR Part 51.100(pp), as amended through November 7, 1986);

7. 15 tons per year of PM<sub>10</sub>; or

8. 10 tons per year of PM<sub>2.5</sub> (does not apply to equipment for which initiation of construction, installation, reconstruction, or alteration (as defined in 567-22.1(455B)) occurred on or before October 23, 2013); or

9. 10 tons per year of any hazardous air pollutant or 25 tons per year of any combination of hazardous air pollutants.

x. The following equipment, processes, and activities:

(1) Cafeterias, kitchens, and other facilities used for preparing food or beverages primarily for consumption at the source.

(2) Consumer use of office equipment and products, not including printers or businesses primarily involved in photographic reproduction.

(3) Janitorial services and consumer use of janitorial products.

(4) Internal combustion engines used for lawn care, landscaping, and groundskeeping purposes.

(5) Laundry activities located at a stationary source that uses washers and dryers to clean, with water solutions of bleach or detergents, or to dry clothing, bedding, and other fabric items used on site. This exemption does not include laundry activities that use dry cleaning equipment or steam boilers.

(6) Bathroom vent emissions, including toilet vent emissions.

(7) Blacksmith forges.

(8) Plant maintenance and upkeep activities and repair or maintenance shop activities (e.g., groundskeeping, general repairs, cleaning, painting, welding, plumbing, retarring roofs, installing insulation, and paving parking lots), provided that these activities are not conducted as part of manufacturing process, are not related

to the source's primary business activity, and do not otherwise trigger a permit modification. Cleaning and painting activities qualify if they are not subject to control requirements for volatile organic compounds or hazardous air pollutants as defined in 567-24.100(455B).

(9) Air compressors and vacuum pumps, including hand tools.

(10) Batteries and battery charging stations, except at battery manufacturing plants.

(11) Equipment used to store, mix, pump, handle or package soaps, detergents, surfactants, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, and aqueous salt or caustic solutions, provided that appropriate lids and covers are utilized and that no organic solvent has been mixed with such materials.

(12) Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.

(13) Vents from continuous emissions monitors and other analyzers.

(14) Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.

(15) Equipment used by surface coating operations that apply the coating by brush, roller, or dipping, except equipment that emits volatile organic compounds or hazardous air pollutants as defined in 567-24.100(455B).

(16) Hydraulic and hydrostatic testing equipment.

(17) Environmental chambers not using gases which are hazardous air pollutants as defined in 567-24.100(455B).

(18) Shock chambers, humidity chambers, and solar simulators.

(19) Fugitive dust emissions related to movement of passenger vehicles on unpaved road surfaces, provided that the emissions are not counted for applicability purposes and that any fugitive dust control plan or its equivalent is submitted as required by the department.

(20) Process water filtration systems and demineralizers, demineralized water tanks, and demineralizer vents.

(21) Boiler water treatment operations, not including cooling towers or lime silos.

(22) Oxygen scavenging (deaeration) of water.

(23) Fire suppression systems.

(24) Emergency road flares.

(25) Steam vents, safety relief valves, and steam leaks.

(26) Steam sterilizers.

(27) Application of hot melt adhesives from closed-pot systems using polyolefin compounds, polyamides, acrylics, ethylene vinyl acetate and urethane material when stored and applied at the manufacturer's recommended temperatures. Equipment used to apply hot melt adhesives shall have a safety device that automatically shuts down the equipment if the hot melt temperature exceeds the manufacturer's recommended application temperature.

y. Direct-fired equipment burning natural gas, propane, or liquefied propane with a capacity of less than 10 million Btu per hour input, and direct-fired equipment burning fuel oil with a capacity of less than 1 million Btu per hour input, with emissions that are attributable only to the products of combustion. Emissions other than those attributable to the products of combustion shall be accounted for in an enforceable permit condition or shall otherwise be exempt under this subrule.

z. Closed refrigeration systems, including storage tanks used in refrigeration systems but excluding any combustion equipment associated with such systems.

aa. Pretreatment application processes that use aqueous-based chemistries designed to clean a substrate, provided that the chemical concentrate contains no more than 5 percent organic solvents by weight. This exemption includes pretreatment processes that use aqueous-based cleaners, cleaner-phosphatizers, and phosphate conversion coating chemistries.

bb. Indoor-vented powder coating operations with filters or powder recovery systems.

cc. Electric curing ovens or curing ovens that run on natural

gas or propane with a maximum heat input of less than 10 million Btu per hour and that are used for powder coating operations, provided that the total cured powder usage is less than 75 tons of powder per year at the stationary source. Records shall be maintained on site by the owner or operator for a period of at least two calendar years to demonstrate that cured powder usage is less than the exemption threshold.

*dd.* Each production painting, adhesive or coating unit using an application method other than a spray system and associated cleaning operations that use 1,000 gallons or less of coating and solvents annually, unless the production painting, adhesive or coating unit and associated cleaning operations are subject to work practice, process limits, emissions limits, stack testing, record-keeping or reporting requirements under 567-subrule 23.1(2), 23.1(3), or 23.1(4). Records shall be maintained on site by the owner or operator for a period of at least two calendar years to demonstrate that paint, adhesive, or solvent usage is at or below the exemption threshold.

*ee.* Any production surface coating activity that uses only nonrefillable handheld aerosol cans, where the total volatile organic compound emissions from all these activities at a stationary source do not exceed 5.0 tons per year.

*ff.* Production welding.

(1) Consumable electrode.

1. Welding operations for which initiation of construction, installation, reconstruction, or alteration (as defined in 567-22.1(455B)) occurred on or before October 23, 2013, using a consumable electrode, provided that the consumable electrode used falls within American Welding Society specification A5.18/A5.18M for Gas Metal Arc Welding (GMAW), A5.1 or A5.5 for Shielded Metal Arc Welding (SMAW), and A5.20 for Flux Core Arc Welding (FCAW), and provided that the quantity of all electrodes used at the stationary source of the acceptable specifications is below 200,000 pounds per year for GMAW and 28,000 pounds per year for SMAW or FCAW. Records that identify the type and annual amount of welding electrode used shall be maintained on site by the owner or operator for a period of at least two calendar years. For stationary sources where electrode usage exceeds these levels, the welding activity at the stationary source may be exempted if the amount of electrode used (Y) is less than:

Y = the greater of  $1380x - 19,200$  or 200,000 for GMAW, or

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$Y = \text{the greater of } 187x - 2,600 \text{ or } 28,000 \text{ for SMAW or FCAW}$

Where "x" is the minimum distance to the property line in feet and "Y" is the annual electrode usage in pounds per year.

If the stationary source has welding processes that fit into both of the specified exemptions, the most stringent limits must be applied.

2. Welding operations for which initiation of construction, installation, reconstruction, or alteration (as defined in 567-22.1(455B)) occurred after October 23, 2013, using a consumable electrode, provided that the consumable electrode used falls within American Welding Society specification A5.18/A5.18M for Gas Metal Arc Welding (GMAW), A5.1 or A5.5 for Shielded Metal Arc Welding (SMAW), and A5.20 for Flux Core Arc Welding (FCAW), and provided that the quantity of all electrodes used at the stationary source of the acceptable specifications is below 12,500 pounds per year for GMAW and 1,600 pounds per year for SMAW or FCAW. Records that identify the type and annual amount of welding electrode used shall be maintained on site by the owner or operator for a period of at least two calendar years. For stationary sources where electrode usage exceeds these levels, the welding activity at the stationary source may be exempted if the amount of electrode used (Y) is less than:

$Y = \text{the greater of } 84x - 1,200 \text{ or } 12,500 \text{ for GMAW, or}$   
 $Y = \text{the greater of } 11x - 160 \text{ or } 1,600 \text{ for SMAW or FCAW}$

Where "x" is the minimum distance to the property line in feet and "Y" is the annual electrode usage in pounds per year.

If the stationary source has welding processes that fit into both of the specified exemptions, the most stringent limits must be applied.

(2) Resistance welding, submerged arc welding, or arc welding that does not use a consumable electrode, provided that the base metals do not include stainless steel, alloys of lead, alloys of arsenic, or alloys of beryllium and provided that the base metals are uncoated, excluding manufacturing process lubricants.

gg. Electric hand soldering, wave soldering, and electric solder paste reflow ovens for which initiation of construction, installation, reconstruction, or alteration (as defined in 567-22.1(455B)) occurred on or before October 23, 2013. Electric hand soldering, wave soldering, and electric solder paste reflow ovens for which initiation of construction, installation, reconstruction, or alteration (as defined in 567-22.1(455B)) occurred after October 23,

2013, shall be limited to 37,000 pounds or less per year of lead-containing solder. Records shall be maintained on site by the owner or operator for at least two calendar years to demonstrate that use of lead-containing solder is less than the exemption thresholds.

*hh.* Pressurized piping and storage systems for natural gas, propane, liquefied petroleum gas (LPG), and refrigerants, where emissions could only result from an upset condition.

*ii.* Emissions from the storage and mixing of paints and solvents associated with the painting operations, provided that the emissions from the storage and mixing are accounted for in an enforceable permit condition or are otherwise exempt.

*jj.* Product labeling using laser and ink-jet printers with target distances less than or equal to six inches and an annual material throughput of less than 1,000 gallons per year as calculated on a stationary sourcewide basis.

*kk.* Equipment related to research and development activities at a stationary source, provided that:

(1) Actual emissions from all research and development activities at the stationary source based on a 12-month rolling total are less than the following levels:

1. 2 pounds per year of lead and lead compounds expressed as lead (40 pounds per year for research and development activities that commenced on or before October 23, 2013);
2. 5 tons per year of sulfur dioxide;
3. 5 tons per year of nitrogen oxides;
4. 5 tons per year of volatile organic compounds;
5. 5 tons per year of carbon monoxide;
6. 5 tons per year of particulate matter (particulate matter as defined in 40 CFR Part 51.100(pp) as amended through November 7, 1986);
7. 2.5 tons per year of PM<sub>10</sub>;
8. 0.52 tons per year of PM<sub>2.5</sub> (does not apply to research and development activities that commenced on or before October 23, 2013); and

9.5 tons per year of hazardous pollutants (as defined in 567-24.100(455B)); and

(2) The owner or operator maintains records of actual operations demonstrating that the annual emissions from all research and development activities conducted under this exemption are below the levels listed in 22.1(2)(k)(1). These records shall:

1. Include a list of equipment that is included under the exemption;

2. Include records of actual operation and detailed calculations of actual annual emissions, reflecting the use of any control equipment and demonstrating that the emissions are below the levels specified in the exemption;

3. Include, if air pollution equipment is used in the calculation of emissions, a copy of any report of manufacturer's testing, if available. The department may require a test if it believes that a test is necessary for the exemption claim; and

4. Be maintained on site for a minimum of two years, be made available for review during normal business hours and for state and EPA on-site inspections, and be provided to the director or the director's designee upon request. Facilities designated as major sources pursuant to 567-22.4(455B) and 567-24.101(455B), or subject to any applicable federal requirements, shall retain all records demonstrating compliance with this exemption for five years.

(3) An owner or operator using this exemption obtains a construction permit or ceases operation of equipment if operation of the equipment would cause the emission levels listed in this exemption to be exceeded.

For the purposes of this exemption, "research and development activities" shall be defined as activities:

1. That are operated under the close supervision of technically trained personnel;

2. That are conducted for the primary purpose of theoretical research or research and development into new or improved processes and products;

3. That do not manufacture more than de minimis amounts of commercial products; and

4. That do not contribute to the manufacture of commercial products by collocated sources in more than a de minimis manner.

ll. A regional collection center (RCC), as defined in 567-Chapter 211, involved in the processing of permitted hazardous materials from households and conditionally exempt small quantity generators (CESQG), not to exceed 1,200,000 pounds of VOC-containing material in a 12-month rolling period. Latex paint drying may not exceed 120,000 pounds per year on a 12-month rolling total. Other nonprocessing emission units (e.g., standby generators and waste oil heaters) shall not be eligible to use this exemption.

mm. Cold solvent cleaning machines that are not in-line cleaning machines, where the maximum vapor pressure of the solvents used shall not exceed 0.7 kPa (5 mmHg or 0.1 psi) at 20oC (68oF). The machine must be equipped with a tightly fitted cover or lid that shall be closed at all times except during parts entry and removal. This exemption cannot be used for cold solvent cleaning machines that use solvent containing methylene chloride (CAS # 75-09-2), perchloroethylene (CAS # 127-18-4), trichloroethylene (CAS # 79-01-6), 1,1,1-trichloroethane (CAS # 71-55-6), carbon tetrachloride (CAS # 56-23-5) or chloroform (CAS # 67-66-3), or any combination of these halogenated HAP solvents in a total concentration greater than 5 percent by weight.

nn. Emissions from mobile over-the-road trucks, and mobile agricultural and construction internal combustion engines that are operated only for repair or maintenance purposes at equipment repair shops or equipment dealerships, and only when the repair shops or equipment dealerships are not major sources as defined in 567-24.100(455B).

oo. A nonroad diesel fueled engine, as defined in 40 CFR 1068.30 as amended through January 24, 2023, with a brake horsepower rating of less than 1,100 at full load measured at the shaft, used to conduct periodic testing and maintenance on natural gas pipelines. For the purposes of this exemption, the manufacturer's nameplate rating shall be defined as the brake horsepower output at the shaft at full load.

(1) To qualify for the exemption, the engine must:

1. Be used for periodic testing and maintenance on natural gas pipelines outside the compressor station, which shall not exceed 330 hours in any 12-month consecutive period at a single location; or

2. Be used for periodic testing and maintenance on natural gas

pipelines within the compressor station, which shall not exceed 330 hours in any 12-month consecutive period.

(2) The owner or operator shall maintain a monthly record of the number of hours the engine operated and a record of the rolling 12-month total of the number of hours the engine operated for each location outside the compressor station and within the compressor station. These records shall be maintained for two years. Records shall be made available to the department upon request.

(3) This exemption shall not apply to the replacement or substitution of engines for backup power generation at a pipeline compressor station.

**22.1(3) Construction permits.** The owner or operator of a new or modified stationary source shall apply for a construction permit. Construction permit applications, including the information referenced above and in 567-22.1(455B) through 567-22.10(455B), shall be submitted in the electronic format specified by the department, if electronic submittal is provided.

The owner or operator of any new or modified industrial anaerobic lagoon shall apply for a construction permit as specified in this subrule and as provided in 567-Chapter 22. The owner or operator of a new or modified anaerobic lagoon for an animal feeding operation shall apply for a construction permit as provided in 567-Chapter 65.

*a. Regulatory applicability determinations.* If requested in writing, the director will review the design concepts of equipment and associated control equipment prior to application for a construction permit. The purpose of the review would be to determine the acceptability of the location of the equipment. If the review is requested, the requester shall supply the following information and submit a fee as required in 567-Chapter 30:

(1) Preliminary plans and specifications of equipment and related control equipment.

(2) The exact site location and a plot plan of the immediate area, including the distance to and height of nearby buildings and the estimated location and elevation of the emission points.

(3) The estimated emission rates of any air contaminants which are to be considered.

(4) The estimated exhaust gas temperature, velocity at the point of discharge, and stack diameter at the point of discharge.

(5) An estimate of when construction would begin and when construction would be completed.

*b. Construction permit applications.* Each application for a construction permit shall be submitted to the department. Final plans and specifications for the proposed equipment or related control equipment shall be submitted with the application for a permit and shall be prepared by or under the direct supervision of a professional engineer licensed in the state of Iowa in conformance with Iowa Code section 542B.1, or consistent with the provisions of Iowa Code section 542B.26 for any full-time employee of any corporation while the employee is doing work for that corporation. The application for a permit to construct shall include the following information:

(1) A description of the equipment or control equipment covered by the application;

(2) A scaled plot plan, including the distance and height of nearby buildings, and the location and elevation of existing and proposed emission points;

(3) The composition of the effluent stream, both before and after any control equipment with estimates of emission rates, concentration, volume and temperature;

(4) The physical and chemical characteristics of the air contaminants;

(5) The proposed dates and description of any tests to be made by the owner or operator of the completed installation to verify compliance with applicable emission limits or standards of performance;

(6) Information pertaining to sampling port locations, scaffolding, power sources for operation of appropriate sampling instruments, and pertinent allied facilities for making tests to ascertain compliance;

(7) Any additional information deemed necessary by the department to determine compliance with or applicability of 567-22.4(455B), 567-22.5(455B), 567-31.3(455B) and 567-33.3(455B);

(8) Reserved.

(9) A signed statement that ensures the applicant's legal

entitlement to install and operate equipment covered by the permit application on the property identified in the permit application. A signed statement shall not be required for rock crushers, portable concrete or asphalt equipment used in conjunction with specific identified construction projects which are intended to be located at a site only for the duration of the specific, identified construction project; and

(10) Application fee.

1. The owner or operator shall submit a fee as required in 567-Chapter 30 to obtain a permit under 22.1(1), 567-22.4(455B), 567-22.5(455B), 567-22.8(455B), 567-22.10(455B), 567-Chapter 31, or 567-Chapter 33.

2. For application submittals from a minor source as defined in 567-Chapter 30, the department shall not initiate review and processing of a permit application submittal until all required application fees have been paid to the department; and

(11) Quantity of greenhouse gas emissions for all applications for projects that will or do have greenhouse gas emissions. For all applications for projects that will not or do not have greenhouse gas emissions, the applicant shall indicate in the application that no greenhouse gases will be emitted and the applicant will not be required to file an inventory of greenhouse gases with that application, unless requested by the department.

*c. Application requirements for anaerobic lagoons.* The application for a permit to construct an anaerobic lagoon shall include the following information:

(1) The source of the water being discharged to the lagoon;

(2) A plot plan, including distances to nearby residences or occupied buildings, local land use zoning maps of the vicinity, and a general description of the topography in the vicinity of the lagoon;

(3) In the case of an animal feeding operation, the information required in 567-Chapter 65;

(4) In the case of an industrial source, a chemical description of the waste being discharged to the lagoon;

(5) A report of sulfate analyses conducted on the water to be used for any purpose in a livestock operation proposing to use an anaerobic lagoon. The report shall be prepared by using standard methods as defined in 567-60.2(455B);

(6) A description of available water supplies to prove that adequate water is available for dilution;

(7) In the case of an animal feeding operation, a waste management plan describing the method of waste collection and disposal and the land to be used for disposal. Evidence that the waste disposal equipment is of sufficient size to dispose of the wastes within a 20-day period per year shall also be provided;

(8) Any additional information needed by the department to determine compliance with these rules.

## 567-22.1

### EPA Rulemakings

CFR: 40 C.F.R. 52.820(c)  
 FRM: 91 FR 43550 (7/14/26)  
 PRM: 91 FR 14658 (3/26/26)  
 State Submission: 7/26/24  
 State Final: IAB 4/16/24; effective 6/19/24  
 APDB File: IA 194; EPA-R07-OAR-2026-1156  
 Description: This revision amends IAC 567-22.1. Revisions were required by Iowa Executive Order 10 and include the addition of definitions from rescinded IAC 567-Chapter 20, removal of redundant language, changes administrative in nature, updated citations, reformatting, and the removal of IAC 567-22.1(3)"b"(8) from SIP approval. Additionally, the following definitions are approved as part of Iowa's Title V Operating Permit Program: "12-month rolling period;" "Electronic format," "electronic submittal," or "electronic submittal format;" "EPA conditional method;" "EPA reference method;" "Initiation of construction, installation, or alteration;" and "Greenhouse gas," as referenced under the *Regulated air pollutant or contaminant (for fee calculation)* definition.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 88 FR 20408 (4/6/23)  
 PRM: 88 FR 4118 (1/24/23)  
 State Submission: 6/3/22  
 State Final: IAB 3/15/22; effective 5/11/22  
 APDB File: IA-189; e-docket No. R07-OAR-2022-0959  
 Description: This revision amends subrule 22.1(3) to require construction permit applications to be submitted in electronic format after January 1, 2023, if electronic submittal is provided.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 86 FR 33544 (6/25/21)  
 PRM: 86 FR 21254 (4/22/21)  
 State Submission: 8/13/20  
 State Final: IAB 6/17/20; effective 07/22/2020  
 APDB File: IA-187; e-docket No. R07-OAR-2021-0266  
 Description: This revision allows electronic submittal of "electronic format" has been adopted to allow electronic submittal of "application(s)," "certification(s)," "determination request(s)," "emissions inventory(ies)," "fees," "form(s)," "notification(s)," "payment(s)," "permit application(s)," and "registration(s)" in rules 567-22.1(455B) through 567- 22.10(455B).

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CFR: 40 C.F.R. 52.820 (c)  
 FRM: 85 FR 33023 (06/01/2020)  
 PRM: 85 FR 10357 (02/24/2020)  
 State Submission: 4/18/2019  
 State Final: IAB 3/13/19; effective 04/17/2019  
 APDB File: IA-185; e-docket No. R07-OAR-2020-0059  
 Description: This revision adds a cross-reference to rule 567-31.3(455B) and corrects the address for the IDNR's Air Quality Bureau.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 84 FR 1615 (2/5/19)  
 PRM: 83 FR 49509 (10/2/18)  
 State Submission: 5/21/18  
 State Final: ARC 3679C 3/14/18; state effective 4/18/18  
 APDB File: IA-180 eff. 2/5/19; EPA-R07-OAR-2018-0642 effective 3/7/19  
 Description: 22.1(2) "i" revised to cross-reference to 31.3(1); 22.1(2) "r" revised to clarify the exemption may only be used if using registration forms provided by department unless engine is exempted in accordance with 40 CFR 1068.30; 22.1(2) "w" grammar revised from "or" to "and" to be inclusive of all pollutants.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 83 FR 49300 (10/1/18)  
 PRM: 83 FR 35451 (7/26/18)  
 State Submission: rec'd 1/9/18  
 State Final: ARC 3440C, IAB 11/8/17, effective 12/13/17  
 APDB File: IA-179 eff. 10/1/18; EPA-R07-OAR-2018-0536 effective 10/31/18  
 Description: These revisions clarify the types of mailing services that may be used for submitting construction permit applications, and clarify that applications are not required to be submitted by certified mail. The revisions also eliminate the requirement for construction permit applications or projects that will not emit greenhouse gases (GHG) to submit the current separate three-page GHG form. Finally, this action includes minor grammatical corrections.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 83 FR 26599 (6/8/18)  
 PRM: 82 FR 43315 (9/15/17)

State Submission: 5/9/17  
 State Final: ARC 2949C, IAB 2/15/17, effective 3/22/17  
 APDB File: IA-177 eff. 7/9/18; EPA-R07-OAR-2017-0470 effective 7/9/18  
 Description: 22.1(1) "b" was revised to remove the federal amendment date for the referenced federal regulation and added language to refer to the state rule in which the federal regulation was adopted by reference. 22.1(1) "c"(2) was revised to update the reference to 40 CFR part 51, subpart G to February 19, 2015. 22.1(2), "Exemptions," was revised to include the most current federal revisions, correct punctuation, grammatical errors and technical errors. 22.1(3) was revised to update construction permit application instructions.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 81 FR 62387 (9/9/16); correction 82 FR 15301 (3/28/17)  
 PRM: 81 FR 62426 (9/9/16)  
 State Submission: 3/31/15  
 State Final: ARC 2352C, IAB 1/6/16, effective 12/16/15  
 APDB File: IA-174 eff. 11/8/16; IA-174a; EPA-R07-OAR-2014-0165 effective 3/28/17  
 Description: This revision amends paragraphs 22.1(3)a, 22.1(3)a(1), b(7), b(8), b(8)8 and b(8)9 and adds subparagraph 10, "Application fee".

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 80 FR 33192 (6/11/2015)  
 PRM: 80 FR 33222 (6/11/2015)  
 State Submission: 11/20/14, 5/4/2015  
 State Final: IAB 10/7/2009, effective 11/11/2009  
 APDB File: IA-169 and IA 170; EPA-R07-OAR-2015-0358 (effective 8/20/15)  
 Description: This revision removes the reference to conditional permits @22.1(1), 22.1(3), and 22.1(4) is rescinded and reserved.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 79 FR 27763 (05/15/2014)  
 PRM: 79 FR 27834 (05/15/2014)  
 State Submission: 1/21/2013  
 State Final: ARC 1227C, IAB 12/11/13, effective 1/15/14  
 APDB File: IA-166; EPA-R07-OAR-2014-0165  
 Effective Date: June 16, 2014  
 Description: This revision amends 22.1(1) introductory paragraph, 22.1(2), 22.1(3)"b"(7), and 22.1(4).

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 79 FR 27490 (5/14/2014)  
 PRM: 79 FR 27546 (5/14/2014)  
 State Submission: 12/12/2013  
 State Final: ARC 1013C, IAB 9/18/13, effective 10/23/13  
 APDB File: IA-165; EPA-R07-OAR-2014-0164 (effective 7/14/14)  
 Description: This revision includes: (1) modifications to the list of construction permitting exemptions to set appropriate emission thresholds and operating conditions for PM<sub>2.5</sub> and Pb; (2) updates to the "insignificant activities" to set appropriate emission thresholds and operating permit conditions for PM<sub>2.5</sub> and Pb; and (3) revisions to permit by rule for spray booths which add the maximum lead content limits for lead-containing sprayed materials, which apply to new facilities or new uses of lead spray materials for operations for owner- or operator-initiated construction, installation, reconstruction or alteration after October 23, 2013.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 78 FR 63887 (10/25/2013)  
 PRM: 78 FR 63937 (10/25/13)  
 State Submission: 3/7/2008, 1/11/2010, 3/1/2011  
 State Final: IAB 10/7/200/, effective 11/11/2009  
 APDB File: IA-141 and IA 143; EPA-R07-OAR-2012-0410 (effective 12/24/13)  
 Description: This revision approves an exemption from construction permitting for certain temporary diesel engines used in periodic testing and maintenance of natural gas pipelines. The exemption contains conditions to ensure that engine emissions will not exceed the emission limits currently allowed under the State's small unit exemption.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 75 FR 10182 (3/5/2010)  
 PRM: 75 FR 10198 (3/5/2010)  
 State Submission: 4/28/2009  
 State Final: IAB 2/11/2009, effective 3/18/2009  
 APDB File: IA-138; No. EPA-R07-OAR-2010-0011  
 Description: Revisions were made to 567-22.1(2) "r" to include new NSPS and NESHAP requirements

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for stationary internal combustion engines.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 74 FR 68692 (12/29/2009)  
 PRM: 74 FR 68761 (12/29/2009)  
 State Submission: 11/18/2008  
 State Final: IAB 5/7/2008, effective 6/11/2008  
 APDB File: IA-131 and IA-134; No. EPA-R07-OAR-2008-0895  
 Description: Revisions were made to 567-22.1(2) "r", "w", "aa" and "nn." Paragraph "r" clarified that an internal combustion engine with a brake horsepower rating of less than 400 measured at the shaft may be subject to the new source performance standards (NSPS). Paragraph "w" corrects the threshold for any combination of hazardous air from 9.375 to 3.75 tons per year. Paragraph "aa" clarifies that the exemption applies to all pretreatment wash processes using aqueous-based chemistries. Paragraph "nn" adds emissions from over-the-road truck internal combustion engines to the description of emissions covered under this exemption.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 73 FR 49950 (8/25/2008)  
 PRM: 73 FR 49981 (8/25/2008)  
 State Submission: 4/14/2008  
 State Final: IAB 2/13/2008, effective 3/19/2008  
 APDB File: IA-129; EPA-R07-OAR-2008-0403  
 Description: This revision adopts new paragraph 22.1(1)(d) specifying that alternative permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment are set forth in rule 567-22.10(455B).

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 71 FR 65414 (11/8/2006)  
 PRM: 71 FR 65446 (11/8/2006)  
 State Submission: 8/29/2006  
 State Final: IAB 7/19/2006, effective 8/23/2006  
 APDB File: IA-117; EPA-R07-OAR-2006-0836  
 Description: This revision updates the CFR amendment date in 22.1(1)b and clarifies the exemption for construction permitting to include laundry activities located at stationary sources in 22.1(2)x(5).

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 71 FR 51117 (08/29/2006)  
 PRM: 71 FR 51181 (08/29/2006)  
 State Submission: 04/24/2006  
 State Final: IAB 03/15/2006, effective 04/19/2006  
 APDB File: IA-113; EPA-R07-OAR-2006-0484  
 Description: This revision exempts certain source categories from the requirement to obtain construction permits. Subrule 22.1(2)m was amended. New paragraph (27) was added to subrule 22.1(2)x. Subrule 22.1(2) was amended by adding new paragraphs jj through mm.

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 71 FR 9938 (02/28/2006)  
 PRM: 71 FR 9987 (02/28/2006)  
 State Submission: 10/19/2005  
 State Final: IAB 09/14/2005, effective 10/19/2005  
 APDB File: IA-107; EPA-R07-OAR-2006-0086  
 Description: This revision adds permitting exemptions for indoor sources of air pollution that are not directly vented to the outside but have emissions that leave the building through doors, vents or other means. Changes were made to 22.1(2) and new paragraphs "x" through "ii" were added to 22.1(2).

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 70 FR 75399 (12/20/2005)  
 PRM: 70 FR 75440 (12/20/2005)  
 State Submission: 04/26/2004 and 07/14/2005  
 State Final: IAB 09/17/2003, effective 10/22/2003; IAB 06/08/2005, effective 07/13/2005  
 APDB File: IA-106; EPA-R07-OAR-2005-IA-0006  
 Description: This revision reflects an updated CFR reference in 22.1(1)"b"; clarifies criteria regarding emission reductions in 22.1(2)"g"; and clarifies the requirements of engineers by replacing the word "registered" with "licensed" in 22.1(3)"b".

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CFR: 40 C.F.R. 52.820(c)  
 FRM: 70 FR 22599 (05/02/2005)  
 PRM: 70 FR 22623 (05/02/2005)  
 State Submission: 12/15/2004  
 State Final: IAB 11/10/2004, effective 12/15/2004

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APDB File: IA-104; EPA-R07-OAR-2005-IA-0002  
Description: This revision clarifies that only untreated wood, seeds or pellets, or other untreated vegetative materials may be burned in fuel burning equipment and residential heating units.

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CFR: 40 C.F.R. 52.820(c)  
FRM: 69 FR 65375 (11/12/2004)  
PRM: 69 FR 65393 (11/12/2004)  
State Submission: 06/07/2004  
State Final: IAB 9/3/2003 ("u" and "v" effective 10/8/2003); 12/10/2003 ("w" effective 1/14/2004)  
APDB File: IA-99; EPA-R07-OAR-2004-IA-0005  
Description: This revision adds paragraphs "u", "v", and "w" to 22.1(2). Paragraph u establishes exemptions for equipment that is either used for nonproduction activities or exhausted inside a building; paragraph v establishes an exemption for manually operated equipment, and paragraph w establishes exemptions for emission units that can be classified as small units.

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CFR: 40 C.F.R. 52.820(c)  
FRM: 68 FR 10969 (03/07/2003)  
PRM: 68 FR 11023 (03/07/2003)  
State Submission: 04/25/2002; 7/18/2002  
State Final: IAB 03/20/2002; 06/12/2002  
APDB File: IA-86; IA-87  
Description: Revisions were made to subrules 22.1(1) c (4), 22.1(2) and 22.1(2) i and a new subrule, 22.1(2) t, was added.

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CFR: 40 C.F.R. 52.820(c)  
FRM: 67 FR 62889 (10/09/2002)  
PRM: 67 FR 62926 (10/09/2002)  
State Submission: 11/26/2001  
State Final: IAB 04/07/1999  
APDB File: IA-89  
Description: Revisions were made to subrules 22.1(3) and 22.1(3) c (3) pertaining to construction permits for anaerobic lagoons.

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CFR: 40 C.F.R. 52.820(c)  
FRM: 67 FR 9591 (03/04/2002)  
PRM: 67 FR 9640 (03/04/2002)  
State Submission: 08/07/2000, 07/18/2001, 12/21/2001  
State Final: IAB 07/15/1998, IAB 06/16/1999, IAB 02/07/2001  
APDB File: IA-79  
Description: Revisions include allowing a true minor source to begin construction prior to obtaining a permit subject to certain conditions; amending permit exemption requirements, amending permit application information required, and various minor clarification and corrections.

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CFR: 40 C.F.R. 52.820(c)  
FRM: 64 FR 67784 (12/3/99)  
PRM: 64 FR 25855 (5/13/99)  
State Submission: 12/11/98; 1/29/99  
State Proposal: IAB 6/17/98; IAB 8/29/98  
State Final: IAB 9/9/98; IAB 11/18/98  
APDB File: IA-74  
Description: This revision adds reference to existing sources and new or reconstructed major sources of HAPs, as well as reference to MACT.

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CFR: 40 C.F.R. 62.3914  
FRM: 64 FR 32425 (6/17/99)  
PRM: 64 FR 32464 (6/17/99)  
State Submission: 2/11/99  
State Proposal: 3/16/98  
State Final: IAB 8/26/98  
APDB File: IA-70  
Description: This revision adds reference to rule 567-23.1(5) as a compliance rule and is part of the States 111(d) plan for medical waste incinerators.

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CFR: 40 C.F.R. 52.820 (c)  
FRM: 64 FR 17548 (4/12/99) and 65 FR 32030 (5/22/00) (correction)  
PRM: 64 FR 17592 (4/12/99)  
State Submission: 8/12/98  
State Proposal: 1/14/98  
State Final: IAB 4/8/98  
APDB File: IA-71

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Description: This revision provides clarification of redundant definitions, corrects various dates, and adds the new address for the IDNR.

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CFR: 40 C.F.R. 52.820(c)(52)(i)(B)  
 FRM: 55 FR 26690 (6/29/90)  
 PRM: None  
 State Submission: 5/7/90  
 State Proposal: IAB 11/15/89 (ARC 412A)  
 State Final: IAB 2/7/90 (ARC 658A) (Effective 3/14/90)  
 APDB File: IA-32  
 Description: This rulemaking recodified Chapters 20-29. It was Water, Air and Waste Management (900) and is now Environmental Protection Commission (567).

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CFR: 40 C.F.R. 52.820(c)(48)(i)(A)  
 FRM: 54 FR 29894 (7/17/89)  
 PRM: None  
 State Submission: 9/13/88  
 State Proposal: IAB 5/18/88 (ARC 8746)  
 State Final: IAB 8/10/88 (ARC 9073) (effective 9/14/88)  
 APDB File: IA-28  
 Description: The EPA approved the state's control of emissions from the seed grain industries roasting process through clarification of the exemption for agricultural operations.

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CFR: 40 C.F.R. 52.820(c)(44)(i)  
 FRM: 50 FR 37176 (9/12/85)  
 PRM: 49 FR 45761 (11/20/84)  
 State Submission: 7/18/84  
 State Proposal: 6/22/83  
 State Final: 7/17/84  
 APDB File: IA-19  
 Description: The EPA approved Chapter 22 regulations (preconstruction review procedures), with the exception of 3 subrules (22.5(4) g, i, and j) on emission offsets.

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CFR: 40 C.F.R. 52.820(c)(43)  
 FRM: 50 FR 37176 (9/12/85)  
 PRM: 49 FR 45761 (11/20/84)  
 State Submission: 7/18/84  
 State Proposal: None  
 State Final: 7/1/83  
 APDB File: IA-19  
 Description: Recodification of the regulations from Chapter 3 of the Iowa Department of Environmental Quality into Department 900, Title II, Chapters 20-39 of the Iowa Department of Water, Air and Waste Management (IDWAWM).

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CFR: 40 C.F.R. 52.820(c)(25)  
 FRM: 42 FR 27892 (6/1/77)  
 PRM: 41 FR 49850 (11/5/76)  
 State Submission: 6/9/76  
 State Proposal: Unknown  
 State Final: Effective 4/26/76  
 APDB File: IA-03  
 Description: This revision requires the director, if requested, to determine the acceptability of new equipment location, and requires permit applications to be complete before 60-day limits begin.

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CFR: 40 C.F.R. 52.820(c)(22)  
 FRM: 41 FR 43407 (10/1/76)  
 PRM: 41 FR 8071 (2/24/76)  
 State Submission: 7/17/75  
 State Proposal: Unknown  
 State Final: 11/14/74  
 APDB File: IA-00  
 Description: This revision exempted incinerators with a rated refuse-burning capacity of less than 25 lbs. per hour from the new source permit requirements.

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CFR: 40 C.F.R. 52.820(b)  
 FRM: 37 FR 10842 (5/31/72)  
 PRM: None  
 State Submission: 1/27/72  
 State Proposal: Unknown  
 State Final: Effective 4/1/72  
 APDB File: IA-00

Description: This rule was approved as part of the original SIP.

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Difference Between the State and EPA-Approved Regulation

The definitions for "anaerobic lagoon," "odor," "odorous substance," "odorous substance source" are not SIP approved.

The definitions for "12-month rolling period;" "Electronic format," "electronic submittal," or "electronic submittal format;" "EPA conditional method;" "EPA reference method;" "Initiation of construction, installation, or alteration;" and "Greenhouse gas," as referenced under the *Regulated air pollutant or contaminant (for fee calculation)* definition are approved as part of Iowa's Title V Operating Permit Program.