## 10.1 Purpose and Ambient Air Quality Standards

It is the public policy of the Linn County Board of Health, and the Linn County Board of Supervisors, that the purpose of this ordinance is to achieve and maintain such levels of air quality as will protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote social development of Linn County, foster economic development, and facilitate the enjoyment of the natural attractions of Linn County, Iowa.

The Department has jurisdiction over the atmosphere of the county to prevent, abate and control air pollution, by establishing standards for air quality and by regulating potential sources of air pollution through a system of general rules or specific permits.

The Linn County ambient air quality standards shall be the National Primary and Secondary Ambient Air Quality Standards as published in 40 Code of Federal Regulations Part 50 (1972) and as amended at 38 Federal Register 22384 (September 14, 1973), 43 Federal Register 46258 (October 5, 1978), 44 Federal Register 8202, 8220 (February 9, 1979), 52 Federal Register 24634-24669 (July 1, 1987), 62 Federal Register 38651-38760, 38855-38896 (July 18, 1997), 71 Federal Register 61144-61233 (October 17, 2006), 73 Federal Register 16436-16514 (March 27, 2008), 73 Federal Register 66964-67062 (November 12, 2008), and 75 Federal Register 6474-6537 (February 9, 2010), and 75 Federal Register 35520-35603 (June 22, 2010) as adopted by reference by the DNR at 567 IAC 28.1. Linn County shall implement these rules in a time frame and schedule consistent with implementation schedules in federal laws, regulations and guidance documents, and Iowa statutes and rules.

All references to 567 IAC Chapter 20 are effective December 11, 2013. All references to 567 IAC Chapter 21 are effective September 10, 2008.

All references to 567 IAC Chapter 22 are effective August 6, 2014.

All references to 567 IAC Chapter 23 are effective August 6, 2014.

All references to 567 IAC Chapter 25 are effective September 19, 2012.

All references to 567 IAC Chapter 28 are effective September 18, 2013.

All references to 567 IAC Chapter 29 are effective April 8, 1998.

All references to 567 IAC Chapter 33 are effective December 11, 2013.

All references to 567 IAC Chapter 34 are effective October 7, 2009.

#### 10.2 Definitions

For use in this ordinance, certain terms and words used herein shall be interpreted or defined as follows:

"Act" means the Clean Air Act, 42 U.S.C Section 7401, et seq.

"Administrator" means, the Administrator of the United States Environmental Protection Agency or the Administrator's designee.

"Affected facility" means, with reference to a stationary source, any apparatus to which a standard is applicable.

"Air contaminant" means dust, fume, mist, smoke, other particulate matter, gas, vapor (except water vapor), radioactive substance, odorous substances or any combination thereof.

"Air contaminant source" means any and all sources of emission of air contaminants whether privately or publicly owned or operated. Air contaminant source includes, but is not limited to, all types of businesses, commercial and industrial plants, works, shops, and stores, heating and power plants and stations, buildings and other structures of all types including single and multiple family residences, office buildings, hotels, restaurants, schools, hospitals, churches and other institutional buildings, automobiles, trucks, tractors, buses, aircraft, and other motor vehicles, garages, vending and service locations and stations, railroad locomotives, ships, boats, and other water-borne craft, portable fuel-burning equipment, indoor and outdoor incinerators of all types, refuse dumps and piles, and all stacks and other chimney outlets from any of the foregoing.

"Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as is or may reasonably tend to be injurious to human, plant, or animal life, or to property, or which unreasonably interferes with the enjoyment of life and property.

"<u>Air pollution alert</u>" means the level of an air pollution episode known as an air pollution alert is that condition when the concentration of air contaminants reach the level at which the first stage control actions are to begin.

"<u>Air pollution control equipment</u>" means any equipment that has the function to prevent the formation of, or to control the emission to the atmosphere of, air contaminants from any fuel-burning equipment, incinerator, or process equipment.

"Air pollution control officer" means the Air Pollution Control
Officer of Linn County Public Health or an authorized representative.

"Air pollution emergency" means the condition when the air quality is continuing to degrade to a level that should never be reached, and that the most stringent control actions are necessary.

"Air pollution episode" means a combination of forecasted or actual meteorological conditions and emissions of air contaminants which may or do present an imminent and substantial endangerment to the health of persons during which the chief meteorological factors are the absence of winds that disperse air contaminants horizontally and a stable atmospheric layer which tends to inhibit vertical mixing through relatively deep layers.

"Air pollution forecast" means an air stagnation advisory issued to the Department by an authorized office of the U.S. Environmental Protection Agency or Iowa Department of Natural Resources that meteorological conditions conducive to an air pollution episode may be imminent. This advisory may be followed by a prediction of the duration and termination of such meteorological conditions.

"Air pollution warning" means the condition when the air quality is continuing to degrade from the levels classified as an air pollution alert, and when control actions in addition to those conducted under an air pollution alert are necessary.

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

"<u>Alter</u>" means to change, make different, modify, vary, construct or reconstruct, diverge or depart from original plan.

"Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access. Ambient air does not include the atmosphere over land owned or controlled by the source and to which public access is precluded by a fence or other physical barriers.

"Anaerobic lagoon" Not SIP approved

"ASME" means the American Society of Mechanical Engineers.

"ASTM" means the American Society for Testing and Materials.

"Atmosphere" means all space outside of buildings, stacks or exterior ducts.

"Attainment area" means any area of the country designated or redesignated by the EPA at 40 CFR Part 81 in accordance with section 107(d) as having attained the relevant NAAQS for a given criteria pollutant. An area can be an attainment area for some pollutants and a nonattainment area for other pollutants.

"<u>Authorization to install</u>" means the authority which has been granted by the Air Pollution Control Officer to authorize an air contaminant source to construct and/or install new installations or control equipment, or alter, modify or delete existing control equipment.

"Auxiliary fuel firing equipment" means equipment to supply additional heat, by the combustion of an auxiliary fuel, for the purpose of attaining temperatures sufficient to dry and ignite the waste material, to maintain ignition thereof, and to promote complete combustion of combustible gases, solids and vapors.

"Backyard burning" means the disposal of residential waste by open burning on the premises of the property where such waste is generated.

"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 Clean Air Act, 42 U.S.C. Sections 7401, et seq. as amended through November 15, 1990.

"Biomass" Not SIP approved.

"Board of Health" means the Linn County Public Health Department's Board of Health.

"Btu" means British thermal unit, the quantity of heat required to raise the temperature of one pound of water from 59°F to 60°F.

"Carbonaceous fuel" means any form of combustible matter (whether solid, liquid, vapor or gas) consisting primarily of carbon-containing compounds in either fixed or volatile form, and which is burned primarily for its heat content.

"CFR" means the Code of Federal Regulations.

"Circumvention" means evasion by the installation of any device or contrivance, or the concealment or the misrepresentation of facts about contaminant emissions for the purpose of misdirecting or evading proper installations or use of air pollution control devices or application of this Ordinance.

"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.

"Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

"Commission" means the Environmental Protection Commission of the Iowa Department of Natural Resources.

"Construction" means fabrication, erection, or installation of an affected facility.

"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" shall have the same definition as "country grain elevator" set forth in 567 IAC 22.10(1).

"Criteria" means information used as guidelines for decisions when establishing air quality goals, air quality standards and the various air quality levels, and which in no case is to be confused or used interchangeably with air quality goals or standards.

"Department" means the Air Quality Division of Linn County Public Health.

"Diesel fuel" means a low sulfur oil that complies with the specifications for grade 1-D or 2-D, as defined by the American Society of Testing and Materials (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 emission calculations for the biodiesel fuel blends specified in numbered paragraph "1" to be equivalent to the air pollutant emissions calculations for unblended diesel fuel.
- 3. Construction permits issued under LCCO §10.5 or Title V operating permits issued under 567 IAC Chapter 22 which restrict equipment fuel use to diesel fuel shall be considered by the Department to include biodiesel fuel blends specified in numbered paragraph "1," unless otherwise specified in LCCO §10.5 or in a permit issued under LCCO §10.5 or 567 IAC Chapter 22.

"<u>Director</u>" means the Director of the Iowa Department of Natural Resources or the Director's designee.

"DNR" means the Iowa Department of Natural Resources.

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

"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 generator does not include:

- 1. Peaking units at electric utilities; or
- 2. Generators at industrial facilities that typically operate at low rates, but are not confined to emergency purposes; or
- 3. Any standby generators that are used during time periods when power is available from the electric utility.

An emergency is an unforeseeable condition that is beyond the control of the owner or operator.

"Emission" means a release of one or more air contaminants into the outside atmosphere.

"Emission limitation and emission standard" means a requirement established by a local government, State government or the Administrator of the Environmental Protection Agency which limits the quantity, rate or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

"Emission Unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 112(b) of the Act. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the Act or any related regulations.

"EPA conditional 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 test methods specified in 40 CFR 51, Appendix M (as amended through December 21, 2010); 40 CFR 60, Appendix A (as amended through September 9, 2010); 40 CFR 61, Appendix B (as amended through October 17, 2000); and 40 CFR 63, Appendix A (as amended through August 20, 2010).
- 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 through September 9, 2010); 40 CFR 60, Appendix F (as amended through September 9, 2010); 40 CFR 75, Appendix A (as amended through March 28, 2011); 40 CFR 75, Appendix B (as amended through March 28, 2011); and 40 CFR 75, Appendix F (as amended through March 28, 2011).

"Equipment" means equipment capable of emitting air contaminants to produce air pollution such as fuel burning, combustion or process devices or apparatus including but not limited to fuel-burning equipment, refuse burning equipment used for the burning of fuel or other combustible material from which the products of combustion are emitted; and including but not limited to apparatus, equipment or process devices which generate heat and may emit products of combustion, and manufacturing, chemical, metallurgical or mechanical apparatus or process devices which may emit smoke, particulate matter or other air contaminants.

"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.

"Excess emission" means any emission which exceeds either the applicable emission standard prescribed in \$10.9 or \$10.14, or any emission limit specified in a permit or order.

"Existing equipment" means equipment, machines, devices or installations that are in operation prior to September 23, 1970.

"Federally enforceable" Not SIP approved.

"Flue" means any duct or passage for air, gases or particulate matter.

"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.

"Fuel burning equipment" means equipment, device or contrivance and all appurtenances thereto, including ducts, breechings, control equipment, fuel-feeding equipment, ash removal equipment, combustion controls, stacks, chimneys, etc., used principally but not exclusively to burn any fuel for the purpose of indirect heating in which the material being heated is not contacted by and adds no substances to the products of combustion.

"Fugitive dust" means any airborne solid particulate matter emitted from any source other than flue or stack and which could not reasonably be passed through a stack, flue or other functionally equivalent opening.

"Garbage" means all solid and semi-solid putrescible and nonputrescible animal and vegetable wastes resulting from the handling, preparing, cooking, storing, and serving of food, or of material intended for use as food, but excluding recognized industrial byproducts.

"Gas cleaning device" means a facility designed to remove air contaminants from gases exhausted from equipment as defined herein.

"Greenhouse gases (GHG)" Not SIP approved.

"Goal" means a level of air quality which is expected to be obtained.

"Ground level" means that area between the existing grade and a point 8 feet there above.

"Hazardous Air Pollutant" means any air pollutant listed in or pursuant to section 112(b) of the Act.

"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 D2015-66.

"Household rubbish" means waste material and trash, not to include garbage, petroleum or asphalt-based products, normally accumulated by a family at a residence in the course of ordinary day-to-day living.

"IAC" means Iowa Administrative Code.

"Incinerator" means a combustion apparatus designed for high temperature operation in which solid, semi-solid, 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 permanent 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.

"Landscape waste" means any vegetable or plant wastes except garbage. The term includes trees, tree trimmings, branches, stumps, brush, weeds, leaves, grass, shrubbery and yard trimmings.

"Level" means a certain specified degree, quality or characteristic.

"Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase of a regulated NSR pollutant; and a significant net emissions increase of that pollutant from the major stationary source.

- 1. Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds or  $NO_{\rm x}$  shall be considered significant for ozone.
- 2. A physical change or change in the method of operation shall not include:

- a. Routine maintenance, repair, and replacement;
- b. Use of an alternative fuel or raw material by reason of an order under Section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act;
- c. Use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act;
- d. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- e. Use of an alternative fuel or raw material by a stationary source that the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition, or that the source is approved to use under any federally enforceable permit condition;
- f. An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition enforceable by the Administrator;
  - g. Any change in ownership at a stationary source;
  - h. Reserved.
- i. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with the requirements within the SIP; and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after the project is terminated;
- j. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis;
- k. The reactivation of a very clean coal-fired electric utility steam generating unit.

3. This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under rule 567 IAC 33.9 for a PAL for that pollutant. Instead, the definition under rule 567 IAC 33.9 shall apply.

## "Major stationary source" means:

- 1. (a) Any one of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant:
  - Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
  - Coal cleaning plants (with thermal dryers);
  - Kraft pulp mills;
  - Portland cement plants;
  - Primary zinc smelters;
  - Iron and steel mill plants;
  - Primary aluminum ore reduction plants;
  - Primary copper smelters;
  - Municipal incinerators capable of charging more than 250 tons of refuse per day;
  - Hydrofluoric, sulfuric, and nitric acid plants;
  - Petroleum refineries;
  - Lime plants;
  - Phosphate rock processing plants;
  - Coke oven batteries;
  - Sulfur recovery plants;
  - Carbon black plants (furnace process);
  - Primary lead smelters;
  - Fuel conversion plants;
  - Sintering plants;
  - Secondary metal production plants;
  - Chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS code 325193 or 312140);
  - Fossil-fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input;
  - Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
  - Taconite ore processing plants;
  - Glass fiber processing plants; and
  - Charcoal production plants.

- (b) Notwithstanding the stationary source size specified in paragraph 1''(a), any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant; or
- (c) Any physical change that would occur at a stationary source not otherwise qualifying under this definition as a major stationary source if the change would constitute a major stationary source by itself.
- 2. A major source that is major for volatile organic compounds or NOx shall be considered major for ozone.
- 3. The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this rule whether it is a major stationary source, unless the source belongs to one of the categories of stationary sources listed in paragraph "1"(a) of this definition or to any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Act.

"Malfunction" means any sudden and unavoidable failure of control equipment or of a process to operate in a normal manner. Any failure that is caused entirely or in part by poor maintenance, careless operation, lack of an adequate maintenance program, or any other preventable upset condition or preventable equipment breakdown shall not be considered a malfunction.

"Maximum achievable control technology (MACT)" Not SIP approved.

"Maximum achievable control technology (MACT) floor" Not SIP approved.

"Modification" means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

"National Ambient Air Quality Standards (NAAQS)" are the standards established pursuant to Section 109 of the Clean Air Act that apply for ambient air.

"National Emission Standards for Hazardous Air Pollutants (NESHAP)" are emission standards established pursuant to Section 112 of the Clean Air Act.

"New equipment" means except for any equipment or modified equipment to which \$10.9(2) applies, any equipment or control equipment not under construction or for which components have not been purchased on or before September 23, 1970, and any equipment which is altered or modified after such date, which may cause the emission of air contaminants or eliminate, reduce or control the emission of air contaminants.

"New facility" means manufacturing, production, or processing of any kind, starting for the first time at a different or new location or the restarting of existing facilities which have been non-operational for two calendar years or more.

"New Source Performance Standards (NSPS)" are performance standards established pursuant to Section 111 of the Clean Air Act.

"Nonattainment area" means any area of the country designated by the EPA at 40 CFR part 81 in accordance with section 107(d) of the Act as nonattainment for one or more criteria pollutants. An area could be a "nonattainment area" for some pollutants and an attainment area for other pollutants.

"Number 1 fuel oil" and "number 2 fuel oil," also known as "distillate oil," mean any fuel oil that complies with the specifications for fuel oil number 1 or fuel oil number 2, as defined by the American Society of Testing and Materials (ASTM) D 396-02, "Standard Specification for Fuel Oils."

- 1. For purposes of the air quality rules contained in Chapter 10 of the Linn County Code of Ordinances 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 emission calculations for the biodiesel fuel blends specified in numbered paragraph "1" to be equivalent to the air pollutant emission calculations for unblended number 1 fuel oil or unblended number 2 fuel oil.
- 3. Construction permits issued under §10.5 or Title V operating permit issued under 567 IAC Chapter 22, which 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 numbered paragraph "1," unless otherwise specified in LCCO §10.5 or in a permit issued under LCCO 10.5 or 567 IAC Chapter 22.

"Objectionable odor" means an odor that is believed to be objectionable by 30 percent or more of a random sample of the people exposed to such odor, with the sample size of at least 30 people, or 75 percent of those exposed if fewer than 30 people are affected.

"Objective" means a certain specified degree, quality or characteristic expected to be attained.

"Odor" means that which produces response of the human sense of smell to an odorous substance.

"Odorous substance" means a gaseous, liquid, or solid material that elicits a psychological response by the human sense of smell.

"Odorous substance source" means any equipment, installation operation, or material which emits odorous substances; such as, but not limited to, a stack, chimney, vent, window, opening, basin, lagoon, pond, open tank, storage pile, or inorganic or organic discharges.

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

"Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

"Open burning" means any burning of combustible materials from which the products of combustion are emitted into the open air without passing through a stack or chimney.

"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.

"Parts per million (ppm)" means a term which expresses the volumetric concentration of one material in one million unit volumes of a carrier material.

"Permit conditions" means operational limits, restrictions, or other guides which have been set by the Air Pollution Control Officer, which govern the operation and/or emissions of a particular permitted air pollution source.

"Permit to Operate" means the authority has been granted by the Air Pollution Control Officer for an air contaminant source to operate new installations or control equipment or to operate altered or modified existing equipment.

"Person" means any individual, firm, corporation, organization, partnership, business, trust, public or private corporation, company, trustee, syndicate, club, institution, agency, or any federal, state or local governmental agency or instrumentality or other entity recognized by law as the subject of rights and duties. The masculine, feminine, singular, or plural is included in any circumstance.

"Petitioned signed complaint" means a complaint by not less than 20 signatures of persons directly aggrieved by the condition causing the complaint when submitted to the Air Pollution Control Officer.

"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.

"PM10" means particulate matter as defined in this rule with an aerodynamic diameter less than or equal to a nominal ten micrometers as measured by an EPA-approved reference method.

"PM2.5" means particulate matter as defined in this rule with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by an EPA-approved reference method.

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a 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 567 IAC 22.10(2), shall apply.

For purposes 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) 8760 hours of operation annually, if the generator has actually been operated more than 500 hours in one of the past five years; or
- 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.

"Prevention of Significant Deterioration (PSD)" means a permit program for new and modified sources issued by the Director pursuant to 567 IAC Chapter 33.

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

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

"Process weight" means the total gross weight of all materials that are capable of causing any discharge into the atmosphere, introduced into a specific process, including liquids in any form, but excluding air and free water in any form.

# "Process weight rate" means a rate established as follows:

- 1. For continuous or long-run steady-state process, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of each period or portion thereof.
- 2. For cyclical or batch process, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.
- 3. 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 emissions shall apply.

"Public Health Department" means the Director or administrative staff of the Linn County Public Health Department.

"Refuse" means garbage, rubbish and all other putrescible and nonputrescible wastes, except sewage and water-carried trade wastes.

"Refuse burning equipment" means any equipment and all appurtenances thereto including incinerator, device or contrivance used for the destruction of garbage, rubbish and/or other wastes by burning.

# "Regulated NSR pollutant" means the following:

- 1. Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator:
- a) Volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment and unclassifiable areas;
- b) Sulfur dioxide is a precursor to  $PM_{2.5}$  in all attainment and unclassifiable areas;
- c) Nitrogen oxides are presumed to be precursors to  $PM_{2.5}$  in all attainment and unclassifiable areas, unless the department demonstrates to EPA's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to the area's ambient  $PM_{2.5}$  concentrations;
- d) Volatile organic compounds are presumed not to be precursors to  $PM_{2.5}$  in any attainment and unclassifiable areas, unless the department demonstrates to EPA's satisfaction or EPA demonstrates that emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient  $PM_{2.5}$  concentrations;
- 2. Any pollutant that is subject to any standard promulgated under section 111 of the Act;
- 3. Any Class I or Class II substance subject to a standard promulgated under or established by title VI of the Act; or
- 4. Any pollutant that otherwise is subject to regulation under the Act as defined in 567 IAC 33.3(1), definition of "subject to regulation."

- 5. Notwithstanding paragraphs "1" through "4", the definition of "regulated NSR pollutant" shall not include any or all hazardous air pollutants that are either listed in Section 112 of the Act or added to the list pursuant to Section 112(b)(2) of the Act and that have not been delisted pursuant to Section 112(b)(3) of the Act, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under Section 108 of the Act.
- 6. Particulate matter (PM) emissions,  $PM_{2.5}$  emissions and  $PM_{10}$  emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures.
- "Replacement unit" means an emissions unit for which all the criteria listed in paragraphs "1" through "4" of this definition are met. No creditable emissions reductions shall be generated from shutting down the existing emissions unit that is replaced.
- 1. The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1) as amended through December 16, 1975, or the emissions unit completely takes the place of an existing emissions unit.
- 2. The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
- 3. The replacement unit does not change the basic design parameter(s) of the process unit.
- 4. The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.
- "Residential waste" means any refuse generated on the premises as a result of residential activities. The term includes landscape waste grown on the premises or deposited thereon by the elements, but excludes garbage, tires, trade wastes, and any locally recyclable goods or plastics.

# "Responsible Official" means one of the following:

1. For a corporation: a president, secretary, vice-president or treasurer of the corporation in charge of a principal business function or any other person who performs similar policy or decision-making functions for the corporation or duly authorized representative of such person if the representative is responsible

for the overall operation of one or more manufacturing production or operating facilities applying for or subject to a permit and either: the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or the delegation of authority to such representative is approved in advance by the permitting authority

- 2. For a partnership or sole proprietorship: a general partner or the proprietor respectively.
- 3. For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this chapter, a principal executive office of a federal agency includes the Chief Executive Officer having responsibility for the overall operations of a principal geographic unit of the agency (eg. A regional Administrator of the EPA).
- 4. For Title IV affected facilities: the designated representative insofar as actions, standards, requirements or prohibitions under Title IV of the Act or the regulations promulgated thereunder are concerned; and the designated representative for any other purposes under this chapter or the Act

"Rubbish" means all waste materials of nonputrescible nature.

"Salvage operations" means any business, industry or trade engaged wholly or in part in salvaging or reclaiming any product or material, including, but not limited to, chemicals, drums, metals, motor vehicles or shipping containers.

"Sampling facilities" means access structure and adequate stack ports or openings, from which air contaminant samples can be taken.

"Seal for sealing equipment or premises" means a device installed by the Air Pollution Control Officer so as to prevent use of the process, fuel-burning, refuse-burning or control equipment or premises being used in violation of this Ordinance.

"Shutdown" means the cessation of operation of an affected facility for any purpose.

# "Significant" means

1. In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, at a rate of emissions that would equal or exceed any of the following rates:

Pollutant and	d Emissions Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy
PM <sub>10</sub>	15 tpy
	10 tpy of direct PM <sub>2.5</sub> emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions (unless the department demonstrates to EPA's satisfaction that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to the
	area's ambient PM <sub>2.5</sub>
PM2.5:	concentrations)
Ozone	40 tpy of volatile organic compounds or NOx
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H2S)	10 tpy
Total reduced sulfur	
(including H2S)	10 tpy
Reduced sulfur compounds	
(including H2S)	10 tpy
Municipal waste combustor organics (measured as total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans)	$3.2 \times 10^{-6}$ megagrams per year (3.5 x $10^{-6}$ tpy)
Municipal waste combustor metals (measured as particulate matter)	14 megagrams per year (15 tons per year)
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	36 megagrams per year (40 tons per year)
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	45 megagrams per year (50 tons per year)

<sup>2. &</sup>quot;Significant" means, for purposes of this rule and in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant not listed in paragraph "1," any emissions rate.

3. Notwithstanding paragraph "1," "significant," for purposes of this rule, means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within ten kilometers of a Class I area and have an impact on such area equal to or greater than 1  $\mu$ g/m³ (24-hour average).

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

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

"Smoke monitor" means a device using a light source and a light detector which can automatically measure and record the light-obscuring power of smoke at a specific location in the flue or stack of a source.

"Source operation" means the last operation preceding the emission of an air contaminant, and which 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.

"Stack, chimney or vent" means any flue, vent, conduit or duct arranged to conduct an air contaminant to the atmosphere.

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

"Standard cubic foot (SCF)" means the volume of one cubic foot of gas at standard conditions.

"Standard metropolitan statistical area (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. Bureau of the Budget (Department of Commerce).

"Startup" means the setting into operation of any control equipment or process equipment or process for any purpose.

"State Implementation Plan (SIP)" means the plan adopted by the State of Iowa and approved by the Administrator which provides for implementation, maintenance, and enforcement of such primary and secondary ambient air quality standards as are adopted by the Administrator, pursuant to the Act.

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

"Subject to regulation" For purposes of this chapter, the definition of "subject to regulation" shall be adopted by reference as defined in Iowa Administrative Code 567- 22.100 (455B).

"Theoretical air" means the exact amount of air required to supply the required oxygen for complete combustion of a given quantity of a specific fuel or waste

"Title V" means Title V of the Clean Air Act, 42 U.S.C. Sections 7401, et seq., and all rules promulgated thereunder.

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

"Trade waste" means any refuse resulting from the prosecution of any trade, business, industry, commercial venture (including farming and ranching), or utility or service activity, and any governmental or institutional activity, whether or not for profit.

"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.

"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 creosote. "Untreated" as it refers to seeds, pellets or other vegetative matter includes only seeds, pellets or other vegetative matter that 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, ordinances, or standards granted by the Air Pollution Control Officer for a specified period of time governing the quality, nature, duration, or extent of emissions.

"<u>Volatile organic compound</u>" or "VOC" means any compound included in the definition of volatile organic compounds found at 40 CFR Section 51.100(s) as amended through January 21, 2009.

### 10.3 Air Quality Division

There is hereby created an air quality division of the Linn County Public Health Department. An Air Pollution Control Officer shall be appointed by the Board of Health and shall perform duties under the supervision of the Director of the Linn County Public Health Department.

## 10.4 Title V and Voluntary Permits

- 1. <u>Title V Permits</u>. Not SIP approved.
- 2. <u>Voluntary Operating Permits</u>. Except as hereafter modified the Voluntary Operating Permit regulations or rules as promulgated as 567 IAC Chapter 22, are hereby specifically incorporated by reference and adopted as a part of this ordinance.

## 10.5 Locally Required Permits

- 1. Application for Permits. Every application for authorization to install or a permit to operate required under \$10.5(2) and \$10.5(3) shall be filed in the manner and form prescribed by the Air Pollution Control Officer.
- 2. Permits for Authorization to Install. Unless exempted in §10.5(9) any person building, erecting, altering or replacing any article, machine, equipment, or other contrivance, the use of which may cause the creation of or emission of air contaminants shall first obtain a permit for authorization to install for such installations from the Air Pollution Control Officer. A permit for authorization to install for new facilities must be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. Thereafter, a permit for modifications and additions to the existing sources and new equipment must be obtained before any on-site construction takes place.

The Air Pollution Control Officer must be notified of any modification or change made from the original plans.

Before an Authorization To Install is granted, the Air Pollution Control Officer may require the applicant to submit the design of sampling ports or continuous monitoring equipment as necessary for testing purposes in order to secure information that will disclose the nature, extent, quality or degree of air contaminants to be discharged into the atmosphere from the article, machine, equipment or other contrivance described in the application. The Air Pollution

Control Officer shall notify the applicant in writing of the required size, number, and location of sampling holes; the size and location of sampling platform; the access to the sampling platform; and the utilities for operating the sampling and testing equipment. The platform and access shall be constructed in accordance with good engineering practice.

### a. Permit Form

Any person building, erecting, altering or replacing any article, machine, equipment, or other contrivance, the use of which may cause the creation of or emission of air contaminants shall make application for a permit for authorization of such installation or alteration. Said application shall contain the following basic information and any additional information pertinent to the individual case:

- 1) Name, address, and location of firm.
- 2) Whether installation is new or an alteration of an existing device.
- 3) Identification of the emission point by number and its plant location.
  - 4) Basic process or activity creating emission
  - 5) Basic principle of the control device.
  - 6) Potential emission from source.
  - 7) Type and quantity of the final emission after control.
  - 8) Estimated equipment operation time in hours per week.
  - 9) Engineering firm(s) responsible for design and installation.
  - 10) Proposed installation completion date.
- 11) The name, address, and telephone number of the person submitting the application or, if such person is a legal entity, the name and address of the individual authorized to accept service of process on its behalf, and this person's signature.
- 12) One set of block diagrams and any other relevant information requested by the Air Pollution Control Officer.

- 13) Any additional information deemed necessary by the Department to determine compliance with or applicability of rules for Prevention of Significant Deterioration.
- 14) 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.

## b. Public Notice Requirements

Before an Authorization to Install is issued for a proposed new major stationary source or authorization is issued for a significant modification to an existing major source as defined in \$10.2 and 567 IAC Chapter 33, a notice of intent shall be published by the Department in a newspaper having general circulation in the area affected by the emissions of the proposed source. The notice and supporting documentation shall be made available for public inspection upon request. Publication of the notice shall be made at least thirty (30) days prior to issuing a permit. The public may submit written comments or request a public hearing. If the response indicates significant interest, a public hearing may be held after due notice.

A copy of the notice announcing the opportunity for public comment shall be sent to the United States Environmental Protection Agency Regional Administrator by the Air Pollution Control Officer.

#### c. Duration of Permit

The expiration date of the Authorization To Install Permit shall be the proposed completion date plus a ninety (90) day adjustment period. If after this time a permit to operate has not been obtained to operate the article, machine, equipment, or other contrivance, the said equipment shall be shut down and not operated until such time as the Air Pollution Control Officer grants a permit to operate the equipment. Extensions of the ninety (90) day adjustment period may be granted by the Air Pollution Control Officer for good cause. Expiration of the Authorization To Install permit does not relieve the applicant from complying with any permit conditions which may have been a part of the original Authorization To Install permit.

#### d. Issuance of Permit

In no case shall an Authorization to Install permit that results in an increase in emissions be issued to any facility which is in violation of any condition found in a permit involving PSD, NSPS, NESHAP or a provision of the Iowa state implementation plan. If the facility is in compliance with a schedule for correcting the violation and that schedule is contained in an order or permit condition, the Department may consider issuance of an Authorization to Install permit. An Authorization To Install permit shall be issued when the Air Pollution Control Officer concludes that the preceding requirement has been met and:

- 1) That the required plans and specifications represent equipment which reasonably can be expected to comply with all applicable emission standards, and
- 2) That the expected emissions from the proposed source or modification, in conjunction with all other emissions, will not prevent the attainment or maintenance of the ambient air quality standards specified in Section 10.1, and
- 3) That the applicant has not relied on emission limits based on stack height that exceeds good engineering practice or any other dispersion techniques as defined in \$10.9(6), and
  - 4) That the applicant has met all other applicable requirements.
- 3. Permit to Operate. The Air Pollution Control Officer is delegated the authority to issue Permits to Operate. Before any article, machine, equipment or other contrivance which when used may cause the creation or emission of air contaminants may be operated, continued in operation, or used beyond the adjustment period described in \$10.5(2), a written permit shall be obtained from the Air Pollution Control Officer. No Permit to Operate or Use shall be granted either by the Air Pollution Control Officer or the Board of Health for any article, machine, equipment, or contrivance described in \$10.5(2) that was constructed or installed without authorization as required by \$10.5(2), until the information required is presented to the Air Pollution Control Officer. The Air Pollution Control Officer shall require the article, machine, equipment, or contrivance altered, if necessary, to conform to standards set forth in this ordinance, prior to granting the permit to operate.

#### a. Permit Form

Application for permit to operate shall be made on forms furnished by the Air Pollution Control Officer. The application shall include the name, address and telephone number of the person submitting the application or, if such person is a legal entity, the name and address of the individual authorized to accept service of process on its behalf and the name of the person in charge of the premises where the pertinent activities are conducted.

#### b. Issuance of Permit

Permits to operate shall be issued only after the Air Pollution Control Officer has made appropriate tests and has determined that the control device is operating within the emission limits established by this Ordinance or as specified in any permit conditions and that operation of the equipment will not prevent the attainment or maintenance of the ambient air quality standards.

The Air Pollution Control officer may require special permit conditions on a case-by case basis when the compliance status, history of operations, ambient air quality in the vicinity, or the type of control equipment utilized warrants such actions.

#### c. Duration of Permit

A permit to operate shall be valid for a period of one year after it is issued. Thereafter each permit shall be renewed on a yearly basis pursuant to \$10.6(2).

### d. Posting of Permit to Operate

A person who has been granted a Permit To Operate any article, machine, equipment, or other contrivance described in \$10.5(3) shall firmly affix an approved identification bearing the emission point number upon the article, machine, equipment, stack or other contrivance in a clearly visible and accessible manner. In the event that the article, machine, equipment, or other contrivance is so constructed or operated that such identification can not be so placed, the emission point number shall be identified in a current site plan and/or process flow drawing to be maintained at the facility. This shall be available at all times to Department personnel.

A person shall not willfully deface, alter, forge, counterfeit, falsify, or falsely display any identification bearing the emission point number on any article, machine, equipment or other contrivance.

- 4. Action on Application. The Air Pollution Control Officer shall act within a reasonable period of time on an application for Authorization To Install or Permit to Operate, and shall notify the applicant in writing of the approval, conditional approval, or denial.
- 5. Denial of Application. In the event of denial of an application for Authorization to Install or Permit to Operate, the Air Pollution Control Officer shall notify the applicant in writing of the reasons therefore. Service of this notification may be made in person or by certified mail, and such service may be proven by the written acknowledgment of the persons served or by affidavit of the person making the service. The Air Pollution Control Officer shall not accept any additional application unless the applicant has corrected the conditions specified by the Air Pollution Control Officer as the reasons for denial of the permit.
- 6. <u>Transfer of Permits</u>. An Authorization to Install permit or a Permit to Operate shall be non-transferable:
- a. From one location to another unless the equipment is portable.(1);
- b. From one piece of equipment to another unless the equipment
  is portable.(1);
  - c. From one person to another.
- (1) When portable equipment for which a permit has been issued is to be transferred from one location to another, the department shall be notified in writing at least 7 days prior to the transfer of the portable equipment to the new location. Written notification shall be submitted to the department through one of the following methods: electronic mail (e-mail), mail delivery service (including U.S. Mail), hand delivery, facsimile (fax), or by electronic format specified by the department (at such time as an Internet-based submittal system or other, similar electronic submittal system becomes available. However, if the owner or operator is relocating the portable equipment to an area currently classified as nonattainment for ambient air quality standards or to an area under a maintenance plan for ambient air quality standards, the owner or operator shall notify the department at least 14 days prior to transferring the portable equipment to the new location. A list of nonattainment and maintenance areas may be obtained from the department, upon request, or on the department's Internet Web site. The owner or operator will be notified by the department at least 10 days prior to the scheduled relocation if said relocation will prevent the attainment or maintenance of ambient air quality

standards and thus require a more stringent emission standard and the installation of additional control equipment. In such a case, the owner or operator shall obtain a supplemental permit prior to the initiation of construction, installation, or alteration of such additional control equipment.

- 7. <u>Certifications</u>. The Air Pollution Control Officer shall, upon request of a holder of an Authorization to Install permit, furnish certification that the described equipment was acquired and/or installed pursuant to and required by this Ordinance.
- 8. Provision of Sampling and Testing Facilities. A person operating or using any article, machine, equipment or other contrivance for which these regulations require a permit shall provide and maintain such sampling and testing facilities as specified in the Authorization to Install permit or Permit to Operate.
- 9. Exemptions from the Authorization to Install Permit and Permit to Operate Requirements. The provisions of \$10.5 shall not apply to the following equipment, except when Prevention of Significant Deterioration Standards (567 IAC 33.1); New Source Performance Standards (40 CFR Part 60 NSPS), (567 IAC 23.1(2), (\$10.9(2)); Emission Standards for Hazardous Air Pollutants (40 CFR Part 61 NESHAP), (567 IAC 23.1(3), (\$10.9(3)); or Emission Standards for Hazardous Air Pollutants for source categories (40 CFR Part 63 NESHAP), (567 IAC 23.1(4), (\$10.9(4) are applicable)).
- a. Fuel-burning equipment for indirect heating and re-heating furnaces or cooling units using natural or liquefied petroleum gas exclusively, with a capacity of less than 10 million BTU per hour input per combustion unit.
  - b. Not SIP approved.
- 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 also is not applicable to equipment used by a person to manufacture commercial feed, as defined in Iowa Code section 198.3, when that feed is normally not fed to livestock owned by that person or another person, in a feedlot, as defined in Iowa Code section 172D.1, subsection 6, or a confinement building owned or operated by that person and located in this state.

- e. Direct-fired residential heaters, cook stoves, or fireplaces, which burn untreated wood, untreated seeds or pellets, or other untreated vegetative materials.
- f. The equipment in laboratories used exclusively for non-production chemical and physical analyses. Non-production 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.
  - g. Recreational fireplaces.
- h. Barbecue pits and cookers except at a meat packing plant or a prepared meat manufacturing facility.
- i. Storage tanks with a capacity of 19,812 gallons or less and an annual throughput of less than 200,000 gallons.
- j. Stacks or vents to prevent escape of sewer gases through plumbing traps. Systems which include any industrial waste are not exempt.
- k. Retail gasoline and diesel fuel handling facilities. The owner or operator of a retail gasoline dispensing facility (GDF) that is subject to applicable national emission standards for hazardous air pollutants (NESHAP) may not use this exemption in accordance with §10.5(9) unless the monthly throughput is less than 10,000 gallons of gasoline.

The owner or operator of an existing, or prior to installing, modifying or reconstructing a GDF which has a monthly throughput  $\geq$  10,000 < 100,000 gallons of gasoline, must submit to the department a completed registration, on forms provided by the department, certifying that the GDF is in compliance with the following federal regulations:

1. National emission standards for hazardous air pollutants (NESHAP) for gasoline dispensing facilities (40 CFR Part 63, Subpart CCCCCC).

The owner or operator of an existing, or prior to installing, modifying or reconstructing a GDF which has a monthly throughput  $\geq$  100,000 gallons of gasoline, must apply for a locally required permit pursuant to \$10.5.

l. A non-production surface coating process that uses only handheld aerosol spray cans.

- m. Brazing, soldering, or welding equipment or portable cutting torches used only for non-production activities.
- n. Asbestos demolition and renovation projects subject to 40 CFR 61.145 as amended through January 16, 1991, as amended in 567 IAC 22.1(2) "k".
- o. A stationary 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 is subject to applicable new source performance standards (NSPS) and/or national emission standards for hazardous air pollutants (NESHAP) based on the date the engine was manufactured, ordered, modified or reconstructed may not use this exemption in accordance with \$10.5(9). The owner or operator, prior to installing, modifying or reconstructing the engine, must submit to the department a completed registration, on forms provided by the department, certifying that the engine is in compliance with the following federal regulations:
- 1. New source performance standards (NSPS) for stationary compression ignition internal combustion engines (40 CFR 60, Subpart IIII); or
- 2. New source performance standards (NSPS) for stationary spark ignition internal combustion engines (40 CFR Part 60, Subpart JJJJ); and
- 3. National emission standards for hazardous air pollutants (NESHAP) for stationary reciprocating internal combustion engines (40 CFR Part 63, Subpart ZZZZ). This is effective retroactive to the applicable effective date of the NSPS and/or NESHAP which is based on the date the engine or fire pump was manufactured, ordered, modified or reconstructed.
- p. Cooling and ventilating equipment: Comfort air conditioning not designed or used to remove air contaminants generated by, or released from, specific units of equipment.

- q. 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 one million Btu per hour fuel capacity. This exemption does not apply to incinerators.
- r. 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:
  - For material stored at ambient temperature, the maximum monthly average temperature as reported by the National Weather Service, or
  - For material stored above or below the ambient temperature, the temperature equal to the highest calendar-month average of the material storage temperature.
- s. 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 non-production activities or exhausted inside a building.
- t. Manually operated equipment, as defined in 567 IAC 22.100, used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, scarfing, surface grinding, or turning.
- u. Incinerators and pyrolysis cleaning furnaces with a rated refuse burning capacity of less than 25 pounds per hour constructed, installed, reconstructed or altered 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 constructed, installed, reconstructed, or modified 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.

- v. Equipment or control equipment which reduces or eliminates all emission to the atmosphere. If a source wishes to obtain credit for emission reductions, a permit must be obtained for the reduction prior to the time the reduction is made. If a construction permit has been previously issued for the equipment or control equipment, all other conditions of the construction permit remain in effect.
  - w. 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 grounds keeping 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., grounds keeping, 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 requirements for volatile organic compounds or hazardous air pollutants as defined in 567 IAC 22.100.
  - (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 IAC 22.100.
  - (16) Hydraulic and hydrostatic testing equipment.
- (17) Environmental chambers not using gases which are hazardous air pollutants as defined in 22.100.
  - (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 accounted 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.
- x. 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.
- y. Closed refrigeration systems, including storage tanks used in refrigeration systems, but excluding any combustion equipment associated with such systems.
- z. 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, cleanerphosphatizers, and phosphate conversion coating chemistries.
- aa. Indoor-vented powder coating operations with filters or powder recovery systems.
- bb. 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.
- cc. Any production surface coating activity that uses only nonrefillable hand-held 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.

- dd. Production welding.
- (1) Consumable electrode.
- 1. Welding operations for which initiation of construction, installation, reconstruction, or alteration (as defined in 10.2) 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 of 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 Y = the greater of 187x - 2,600 or 28,000 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.

2. Welding operations for which initiation of construction, installation, reconstruction, or alteration (as defined in 10.2) occurred after October 23, 2013, using a consumable electrode, provided that the consumable electrode 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 specification is below 1,600 pounds per year for GMAW and 12,500 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 84x - 1,200 or 1,600 for GMAW, or Y = the greater of 11x - 160 or 12,500 for SMAW or FCAW

Where "x" is the minimum distance of 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 any stainless steel, alloys of lead, alloys of arsenic, or alloys of beryllium and provided that the base metals are uncoated, excluding manufacturing process lubricants.
- ee. Electric hand soldering, wave soldering, and electric solder paste reflow ovens for which initiation of construction, installation, reconstruction, or alteration (as defined in 10.2) 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 10.2) 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.

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

- ff. Pressurized piping and storage systems for natural gas, propane, liquefied petroleum gas (LPG), and refrigerants, where emissions could only result from an upset condition.
- gg. 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.
- hh. 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 source-wide basis.

- ii. A regional collection center (RCC), as defined in 567 IAC 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 non-processing emission units (e.g., standby generators and waste oil heaters) shall not be eligible to use this exemption.
- jj. 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  $20^{\circ}\text{C}$  ( $68^{\circ}\text{F}$ ). 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 can not 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.
- kk. 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 rule 567 IAC 22.100.

## 11. Reserved.

mm. 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:
- 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);
  - 5 tons per year of sulfur dioxide;
  - 5 tons per year of nitrogen oxides;
  - 5 tons per year of volatile organic compounds;

- 5 tons per year of carbon monoxide;
- 5 tons per year of particulate matter (particulate matter as defined in 40 CFR Part 51.100(pp) as amended through November 29, 2004);
  - 2.5 tons per year of  $PM_{10}$ ;
- 0.52 tons per year of  $PM_{2.5}$  (does not apply to research and development activities that commenced on or before October 23, 2013); and
- 5 tons per year of hazardous air pollutants (as defined in 10.2); 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 subparagraph (1) above. 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 rules 567 IAC 22.4 and LCCO 10.4, 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; and
- 2. That are conducted for the primary purpose of theoretical research or research and development into new or improved processes and products; and
- 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.
- nn. A non-road diesel fueled engine, as defined in 40 CFR 1068.30 and as amended through October 8, 2008, 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 with 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.
- $\underline{\mbox{(3)}}$  This exemption shall not apply to the replacement or substitution of engines for backup power generation at a pipeline compressor station.
- 10. Emissions Offsets for Non-Attainment Designated Areas. Rule 567 IAC 22.5 of the Iowa Administrative Code, is hereby made a part of this Ordinance by reference.

11. <u>Dispersion Credit Allowance</u>. For the purpose of Authorization to Install review, primarily the determination of dispersion credit allowed for stack heights that exceed "good engineering practice", the Iowa Administrative Code rule 567-23.1(5) as mended, shall apply and is hereby made a part of this Ordinance by reference.

#### 10.6 Permit Fees

- 1. <u>Initial Applications</u>. Every applicant for a Permit to Operate, a permit for variance, a permit for Authorization To Install any article, machinery, equipment or other contrivance for which such permit or authorization is required by the terms of this Ordinance or otherwise required by law, shall pay a filing fee.
- 2. Annual Fee for Permit to Operate. Each Permit to Operate shall be renewed on the annual operating fee due date, (hereafter referred to as the invoice due date), set by the Air Pollution Control Officer. This provision shall apply to all Permits To Operate required by \$10.5(3) of this Ordinance.

The annual renewal fee shall be payable for each Permit to Operate, and shall be paid by the invoice due date.

If the annual operating fee is not paid by the invoice due date, the permit shall expire and no longer be valid. The permit holder shall be notified by mail by the Air Pollution Control Officer.

The Air Pollution Control Officer shall have the authority to deny renewal of any Permit to Operate for equipment that is found to be out of compliance with the emission standards or requirements set out in this Ordinance. The Air Pollution Control Officer shall have the authority to deny issuance of, or the renewal of, any permit to any person who has been previously cited for any violation of this Ordinance and who has not paid in full all fines, court costs and restitution entered as a judgment against them or who is not in current with any Court ordered payment plan for such fines, court costs and restitution. This provision does not limit the Air Pollution Control Officer's power to otherwise collect unpaid fines, court costs or restitution.

- 3. Filing Fees for Untimely Permits. Notwithstanding section \$10.6(1) or \$10.6(2) above, all applicants for an Authorization to Install made after the initiation of on-site construction; for an Authorization to Install and a Permit to Operate for emission sources already in operation; or for renewals made after the expiration date; shall pay a late filing fee for each permit or renewal required. Nothing herein shall limit the Air Pollution Control Officer's power to enforce the penalty provisions of this ordinance in lieu of or in addition to the collection of this filing fee.
- 4. Fees required under Sections 10.6(1), 10.6(2) and 10.6(3) above shall be recommended by the Air Pollution Control Officer and be established by resolution of the Linn County Board of Supervisors.

#### 10.7 Visible Emissions

No person shall allow, cause, or permit the emission of visible air contaminants of a density or shade equal to or darker than that designated 20 percent opacity, into the atmosphere from any equipment, internal combustion engine, premise fire, open fire, or stack, except as provided below and in §10.15. The federal method for visual determination of opacity of emissions and requirements for qualified observers defined in Method 9, 40 CFR Part 60, Appendix A, as amended through March 12, 1996 in 567 IAC 29.1 is adopted by reference.

To qualify as an observer, an individual must meet the requirements of 567-29.1 of the Iowa Administrative Code.

## 1. General Exceptions.

- a. Residential Heating Equipment. Residential natural or propane gas fired heating equipment serving dwellings of 4 family units or less is exempt.
- b. Gasoline-powered Vehicles. No person shall allow, cause or permit the emissions of visible air contaminants from gasoline-powered motor vehicles for longer than 5 consecutive seconds.
- c. Diesel-powered Vehicles. No person shall allow, cause, or permit the emission of visible air contaminants from diesel-powered motor vehicles of a shade or density equal to or darker than that designated as 40 percent opacity, for longer than 5 consecutive seconds.
- d. Diesel-powered Locomotives. No person shall allow, cause, or permit the emission of visible air contaminants from diesel-powered

locomotives of a shade or density equal to or darker than that designated as 40 percent opacity, except for a maximum period of 40 consecutive seconds during acceleration under load, or for a period of 4 consecutive minutes when a locomotive is loaded after a period of idling.

- e. Startup and Testing. Initial start and warm-up of a cold engine, the testing of an engine for trouble, diagnosis or repair, or engine research and development activities, is exempt.
- f. A darkness or opacity equal to but no greater than 40 percent opacity shall be permitted for a period or periods aggregating 6 minutes in any 60 minute period when building a new fire, cleaning a fire, cleaning pollution control equipment or when blowing tubes and flues in a power plant, heating plant, or a domestic heating plant. This time may be extended for scheduled maintenance with the approval of the Air Pollution Control Officer.
- g. Uncombined Water. The provisions of this paragraph shall apply to any emission which would be in violation of these provisions except for the presence of uncombined water, such as condensed water vapor.
- 2. Abnormal conditions or breakdown which cause emissions in excess of the limitations specified above shall comply with §10.14 of this Ordinance

## 10.8 Emissions From Fuel-Burning Equipment

# 1. General Provisions.

a. This section applies to installations in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so, the products of combustion do not come into direct contact with process materials. Fuel includes those such as coal, coke, lignite, coke breeze, fuel oil, and wood but does not include refuse. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitations shall apply.

- b. The heat content of coal shall be determined according to ASTM standard method D-3176-84, "Ultimate Analysis of Coal and Coke", and ASTM standard method D-3180- 84, "Calculating Coal and Coke Analyses From As-determined to Different Bases", or ASTM standard test method D-3286-82, "Gross Calorific Value of Solid Fuel by the Isothermal-Jacket Bomb Calorimeter". The heat content of oil shall be determined according to ASTM standard test method D-240-76 (Reapproved 1980), "Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter". The four publications cited in this section are hereby made part of this Ordinance by reference.
- c. For purposes of this Ordinance the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or stacks. The heat input value used shall be the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

# 2. Emission Limitation.

a. No person shall cause or permit the emission of particulate matter caused by combustion of fuel in fuel-burning equipment, from any stack or chimney in excess of the quantities set forth in the following table:

	Maximum allowable emission of	
Heat input millions of	particulate matter in pounds per	
British thermal units	hour per million British thermal	
per hour.	units of heat input.	
10 0.600	10 0.600	
50 0.412	50 0.412	
100 0.352	100 0.352	
500 0.242	500 0.242	
1,000 0.207	1,000 0.207	
4,000 0.150	4,000 0.150	
8,000 0.102	8,000 0.102	
10,000 0.0904	10,000 0.0904	
15,000 0.0717	15,000 0.0717	
20,000 0.0607	20,000 0.0607	
40,000 0.0409	40,000 0.0409	
50,000 0.0358	50,000 0.0358	
100,000 0.0243	100,000 0.0243	

b. Not SIP approved.

- c. For a new fossil fuel-fired steam generating unit of more than 250 million BTU per hour heat input, \$10.9(2) (a) (1) shall apply. For a new unit of between 150 million and 250 million (inclusive) BTU per hour heat input, the maximum allowable emissions from such new unit shall be 0.2 pounds of particulates per million BTU of heat input. For a new unit of less than 150 million BTU per hour heat input, the maximum allowable emissions from such new unit shall be as determined in \$10.8(2) (a).
- 3. Exemption for Residential Heaters Burning Solid Fuels. Not SIP approved.
- 4. Nuisance Conditions for Fuel Burning Equipment. Not SIP approved.

#### 10.9 Emissions Standards

1. Emissions of Particulate Matter No person shall permit, cause, suffer or allow the emission of particulate matter into the atmosphere in any one hour from any emission point from any process equipment at a rate in excess of that specified in Table I for the process weight rate allocated to such emission point. In any case, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas or Table I of this section, whichever would result in the lowest allowable emission rate.

TABLE I		
ALLOWABLE RATE OF EMI	SSION BASED ON PROCESS	S WEIGHT RATE*
Process Weight Rate	Rate of Emission	
Lb/HR	Tons/Hr	Lb/Hr
100	0.05	0.551
200	0.10	0.877
400	0.20	1.40
600	0.30	1.83
800	0.40	2.22
1,000	0.50	2.58
1,500	0.75	3.38
2,000	1.00	4.10
2,500	1.25	4.76
3,000	1.50	5.38
3,500	1.75	5.96
4,000	2.00	6.52
5,000	2.50	7.58
6,000	3.00	8.56
7,000	3.50	9.49
8,000	4.00	10.40

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	TABLE I	
ALLOWABLE RATE OF EMI	ISSION BASED ON PROCES:	S WEIGHT RATE*
Process Weight Rate	Rate of Emis	ssion
9,000	4.50	11.20
10,000	5.00	12.00
12,000	6.00	13.60
14,000	7.00	15.10
16,000	8.00	16.50
18,000	9.00	17.90
20,000	10.00	19.20
30,000	15.00	25.20
40,000	20.00	30.50
50,000	25.00	35.40
60,000	30.00	40.00
70,000	35.00	41.30
80,000	40.00	42.50
90,000	45.00	43.60
100,000	50.00	44.60
120,000	60.00	46.30
140,000	70.00	47.80
160,000	80.00	49.00
200,000	100.00	51.20
1,000,000	500.00	69.00
2,000,000	1,000.00	77.60
6,000,000	3,000.00	92.70

\*Interpolation of the data in this table for process weight rates up to 60,000 lb/hr shall be accomplished by the use of the equation:

$$E = 4.10 (P^{0.67})$$

and interpolation and extrapolation of the data for process weight rates in excess of 60,000 lb/hr shall be accomplished by use of the equation:

$$E = 55.00 (P^{0.11}) - 40$$

where E = rate of emission in lb/hr, and P = process weight in tons/hr.

- a. General Emission Rate: The emission standards specified in this section shall apply and those specified in §\$10.8 and 10.9 and Table I shall not apply to each process of the types listed in the following sections, with the following exception: whenever the compliance status, history of operations, ambient air quality in the vicinity, or the type of control equipment utilized, would warrant maximum control, the Air Pollution Control Officer shall enforce 0.1 grains per standard cubic foot of exhaust gas, Section 10.8 or Section 10.9, whichever would result in the lowest allowable emission rate.
- b. Asphalt Batching Plants. No person shall cause, allow or permit the operation of an asphalt batching plant in a manner such that the particulate matter discharged to the atmosphere exceeds 0.15 grains per standard cubic foot of exhaust gas.
- c. <u>Cement Kilns</u>. Cement kilns shall be equipped with air pollution control devices to reduce the particulate matter in the gas discharged to the atmosphere to no more than 0.3 percent of the particulate matter entering the air pollution control device. Regardless of the degree of efficiency of the air pollution control device, particulate matter discharged from such kilns shall not exceed 0.1 grains per standard cubic foot of exhaust gas.
- d. <u>Cupolas for Metallurgical Melting</u>. The emissions of particulate matter from all new foundry cupolas, and from all existing foundry cupolas with a process weight rate in excess of 20,000 pounds per hour, shall not exceed the amount determined from Table I. The emission of particulate matter from all existing foundry cupolas with a process weight rate less than or equal to 20,000 pounds per hour shall not exceed the amount determined from Table II.

. T.T		
TABLE II		
NS FROM EXISTING		
SMALL FOUNDRY CUPOLAS		
Allowable Emission		
(11/hr)		
3.05		
4.70		
6.35		
8.00		
9.58		
11.30		
12.90		
14.30		
15.50		
16.65		
18.70		
20.15		
21.60		
23.40		
25.10		

- e. <u>Electric Furnaces for Metallurgical Melting</u>. The emissions of particulate matter to the atmosphere from electric furnaces used for metallurgical melting shall not exceed 0.1 grains per standard cubic foot of exhaust gas.
- f. Feed Grinding and Mixing Plants. No person shall cause, allow, or permit the operation of equipment for the handling, grinding, mixing, or blending of grain products for use as animal food or food supplement such that the particulate matter discharged to the atmosphere exceeds 0.1 grains per standard cubic foot of exhaust gas.
- g. Grain Handling and Processing Plants. No person shall cause, allow, or permit the operation of equipment at a permanent installation for the handling or processing of grain, grain products and grain by-products such that the particulate matter discharged to the atmosphere exceeds 0.1 grains per standard cubic foot of exhaust gas.
- a. The particulate matter discharged to the atmosphere from a grain bin vent at a country grain elevator, as "country grain elevator" is defined in 567 IAC 22.10(1), shall not exceed 1.0 grain per dry standard cubic foot of exhaust gas.

- b. The particulate matter discharged to the atmosphere from a grain bin vent that was constructed, modified or reconstructed before March 31, 2008, at a country grain terminal elevator, as "country grain terminal elevator" is defined in 567 IAC 22.10(1), or at a grain terminal elevator, as "grain terminal elevator" is defined in 567 IAC 22.10(1), shall not exceed 1.0 grain per dry standard cubic foot of exhaust gas.
- c. The particulate matter discharged to the atmosphere from a grain bin vent that is constructed or reconstructed on or after March 31, 2008, at a country grain terminal elevator, as "country grain terminal elevator" is defined in 567 IAC 22.10(1), or at a grain terminal elevator, as "grain terminal elevator" is defined in 567 IAC 22.10(1), shall not exceed 0.1 grain per dry standard cubic foot of exhaust gas.
- h. <u>Lime Kilns</u>. No person shall cause, allow, or permit the operation of a kiln for the processing of limestone such that the particulate matter in the gas discharged to the atmosphere exceeds 0.1 grains per standard cubic foot of exhaust gas.
- i. Meat Smokehouses. No person shall cause, allow, or permit the operation of a meat smokehouse or a group of meat smokehouses which consume more than ten (10) pounds of wood, sawdust, or other material per hour such that the particulate matter discharged to the atmosphere exceeds 0.2 grains per standard cubic foot of exhaust gas.

# j. Phosphate Processing Plants.

- 1) Phosphoric acid manufacture. No person shall allow, cause, or permit the operation of equipment for the manufacture of phosphoric acid that was in existence on October 22, 1974, in a manner that produces more than 0.04 pounds of fluoride per ton of phosphorous pentoxide or equivalent input.
- 2) Diammonium phosphate manufacture. No person shall allow, cause, or permit the operation of equipment for the manufacture of diammonium phosphate that was in existence on October 22, 1974, in a manner that produces more than 0.15 pounds of fluoride per ton of phosphorous pentoxide or equivalent input.
- 3) Nitrophosphate manufacture. No person shall allow, cause, or permit the operation of equipment for the manufacture of nitrophosphate in a manner that produces more than 0.06 pounds of fluoride per ton of phosphorus pentoxide or equivalent input.

- 4) No person shall cause, allow, or permit the operation of equipment for the processing of phosphate ore, rock, or other phosphatic material (other than equipment used for the manufacture of phosphoric acid, diammonium phosphate or nitrophosphate) in a manner such that the unit emissions of fluoride exceed 0.4 pounds of fluoride per ton of phosphorous pentoxide or its equivalent input.
- 5) Notwithstanding "1" through "4," no person shall allow, cause, or permit the operation of equipment for the processing of phosphorus ore, rock or other phosphatic material including, but not limited to , phosphoric acid, in a manner that emissions of fluorides exceed 100 pounds per day.
- 6) "Fluoride" means elemental fluorine and all fluoride compounds as measured by reference methods specified in Appendix A to 40 CFR Part 60 as amended through March 12, 1996, as adopted in 567 IAC Chapter 23.
- 7) Calculation. The allowable total emission of fluoride shall be calculated by multiplying the unit emission specified above by the expressed design production capacity of the process equipment.
- k. <u>Portland Cement Batching Plants</u>. No person shall cause, allow, or permit the operation of a Portland cement batching plant such that the particulate matter in the gas discharged to the atmosphere exceeds 0.1 grains per standard cubic foot of exhaust gas.
- l. <u>Incinerator</u>. A person shall not cause, allow, or permit the operation of an incinerator unless it is provided with appropriate control of emissions of particulate matter and visible air contaminants.
- 1) Particulate matter. A person shall not cause, allow, or permit the operation of an incinerator in a manner such that the particulate matter discharged to the atmosphere 0.2 grain per standard cubic foot of exhaust gas adjusted to 12 percent carbon dioxide.

A person shall not allow, cause, or permit the operation of an incinerator with a rated refuse burning capacity of less than 1000 pounds per hour in a manner such that the particulate matter discharged to the atmosphere exceeds 0.35 grains per standard cubic foot of exhaust gas adjusted to 12 percent carbon dioxide.

- 2) Visible emissions. A person shall not allow, cause, or permit the operation of an incinerator in a manner such that it produces visible emissions which have an appearance, density, or shade darker than 20% opacity or that level specified in a federally enforceable permit; except that visible emissions which have an appearance, density, or shade not darker than 40% opacity may be emitted for a period or periods aggregating not more than 3 minutes in any 60 minute period during an operation breakdown or during the cleaning of air pollution control equipment.
- m. Sand Handling and Surface Finishing Operations in Metal Processing. This subsection shall apply to any new foundry or metal processing operation not properly termed a combustion, melting, baking or pouring operation. For purposes of this subsection, a new process is any process which has not started operation, or the construction of which has not been commenced, or the components of which have not been ordered or contracts for the construction of which have not been let on August 1, 1977. No person shall allow, cause, or permit the operation of any equipment designed for sand shakeout, mulling, molding, cleaning, preparation, reclamation or rejuvenation or any equipment for abrasive cleaning, shot blasting, grinding, cutting, sawing or buffing in such a manner that particulate matter discharged from any stack exceeds 0.05 grains per dry standard cubic foot of exhaust gas, regardless of the types and number of operations that discharge from the stack.
- n. Painting and Surface Coating Operations. No person shall allow, cause, or permit painting and surface coating operations in a manner such that particulate matter in the gas discharge exceeds 0.01 grains per standard cubic foot of exhaust gas.
- 2. New Source Performance Standards. Not SIP approved.
- 3. Emission Standards for Hazardous Air Pollutants. Not SIP approved.
- 4. Emission Standards for Hazardous Air Pollutants for Source Categories. Not SIP approved.

This rule is intended to implement Iowa Code section 455B.133.

## 10.10 Open Burning

- A. No person shall allow, cause or permit open burning of combustible materials, except as follows.
- 1. Open burning of the following types may be allowed provided a valid open burning permit is obtained.

- a. <u>Dangerous Materials</u>. Fires for the disposal of dangerous materials or for the prevention of a fire hazard when other alternative methods of disposal are not available or impractical.
- b. Training Fires. For the purpose of this paragraph, a "training fire" is a fire set for the purpose of conducting a bona fide training of public or industrial employees in fire fighting methods. For the purpose of this subparagraph, "bona fide training" means training that is conducted according to the National Fire Protection Association 1403 Standard on Live Fire Training Evolutions (2002 Edition), or a comparable training fire standard. A training fire may be conducted, provided that all of the following conditions are met:
- 1. A training fire on a building is conducted with the building structurally intact
- 2. The training fire does not include the controlled burning of a demolished building.
- 3. If the training fire is to be conducted on a building, written notification must be provided to the Director and the Department on IDNR Form 542-8010, "Notification of an Iowa Training Fire-Demolition or a Controlled Burn of a Demolished Building," and must be postmarked or delivered to the Director at least ten working days before such action commences
- 4. Notification shall be made in accordance with 40 CFR Section 61.145 as amended through January 16, 1991, which is the "Standard for Demolition and Renovation" of the asbestos National Emission Standard for Hazardous Air Pollutants.
- 5. All asbestos-containing material shall be removed prior to the training fire.
- 6. Asphalt shingles may be burned in a training fire only if notification to the Director contains testing results indicating that none of the layers of asphalt shingles contain asbestos. During each calendar year, each fire department may conduct no more than two training fires on buildings where asphalt shingles have not been removed, provided that for each of those training fires the asphalt roofing material present has been tested to ensure that it does not contain asbestos.
- 7. Rubber tires and other trash or garbage materials are not allowed substances for inclusion in training fires.

- 8. A copy of all asbestos test results shall be submitted to the Department. The Air Pollution Control Officer reserves the authority to inspect the proposed burning premises to verify compliance with the above listed requirements before issuing the open burning permit. The Air Pollution Control Officer may deny any training fire request based on factors such as public health, air quality in the vicinity and effects to the local environment or where evidence suggests that allowing the burning would cause the violation of any National Ambient Air Quality Standards.
- c. Agricultural Structures. The open burning of agricultural structures, provided that the open burning occurs on the premises, and for agricultural structures located within a city or town, at least one- fourth mile from any building inhabited by a person other than the landowner, a tenant, or an employee of the landowner or tenant conducting the open burning unless a written waiver in the form of an affidavit is submitted by the owner of the building to the Department prior to the open burning. All chemicals and asphalt shingles shall be removed. All structures shall be inspected for suspect asbestos content by a state certified asbestos inspector. All asbestos-containing material shall be removed prior to burning. Burning shall be conducted only when weather conditions are favorable with respect to surrounding property. Tires shall not be used to ignite agricultural structures. The asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP), as amended through January 16, 1991, requires that burning of agricultural structures to be conducted in accordance with 40 CFR Section 61.145, "Standard for Demolition and Renovation." For the purposes of this subrule, "agricultural structures" means barns, machine sheds, storage cribs, animal confinement buildings, and homes located on the premises and used in conjunction with crop production, livestock or poultry raising and feeding operations. "Agricultural structures," for asbestos NESHAP purposes, includes all of the above, with the exception of a single residential structure on the premises having four or fewer dwelling units, which has been used only for residential purposes.
- d. <u>Disaster Rubbish</u>. The open burning of rubbish, including landscape waste, for the duration of the community disaster period in cases where an officially declared emergency condition exists.
- e.  $\underline{\text{Flare Stacks}}$ . The open burning or flaring of waste gases, providing such open burning or flaring is conducted in compliance with \$10.7 of this ordinance.

- f. <u>Landscape Wastes</u>. Fires set for the disposal of landscape wastes including grass, leaves, weeds, trees, tree limbs, natural growth for land clearing, agricultural wastes, etc. providing these fires comply with \$10.7 of this ordinance. However, the burning of landscape waste produced in clearing, grubbing and construction operations shall be limited to areas located at least one-fourth mile from any building inhabited by other than the landowner or tenant conducting the open burning. Burning shall be conducted when weather conditions are favorable with respect to surrounding property. Rubber tires shall not be used to ignite landscape waste. The open burning of landscape waste is limited to the property where such waste is generated.
- g. <u>Ceremonial Burning</u>. Fires for ceremonial/recreational purposes such as American Legion flag burning, pep rallies, religious ceremonies, etc. These fires must be under the legitimate sponsorship of a bona fide civic, fraternal, religious, educational, or similar organization and must comply with §§10.7 and 10.11 of this ordinance.
- h. Trees and Tree Trimmings. The open burning of trees and tree trimmings not originated on the premises provided that the burning site is operated by a local governmental entity, the burning site is fenced and access is controlled, burning is conducted on a regularly scheduled basis and is supervised at all times, burning is conducted only when weather conditions are favorable with respect to surrounding property, and the burning site is limited to areas at least one-quarter mile from any inhabited building unless a written waiver in the form of an affidavit is submitted by the owner of the building to the Department and to the local governmental entity prior to the first instance of open burning at the site. The written waiver shall become effective only upon recording in the office of the recorder of deeds of the county in which the inhabited building is located. When the open burning of trees and tree trimmings causes air pollution as defined in Iowa Code section 455B.131(3), the Department may take appropriate action to secure relocation of the burning operation. Rubber tires shall not be used to ignite trees and tree trimmings.
- i. Other Burning. Other open burning such as, but not limited to, native prairie management may be allowed on a case by case basis, through the issuing of an open burning permit, provided the Air Pollution Control Officer has determined that the burning will not adversely affect the air quality or will not violate any sections of this Ordinance and is reasonable and practical as compared to other alternatives available.
- 2. Open Burning Permits shall be issued by the Linn County Air Pollution Control Officer.

Every application for an open burning permit required under \$10.10 shall be filed in the manner and form prescribed by the Air Pollution Control Officer.

Fees for Open Burning Permits shall be recommended by the Air Pollution Control Officer and be established by resolution of the Linn County Board of Supervisors, except federal, state, or local government agencies or public districts are not required to pay such fee.

Open Burning Permits are valid provided the following conditions are met and maintained:

- a. The permit fee has been paid. Fees not paid in person shall be deemed paid on the date of mailing;
- b. Open burning permits must be signed by the Air Pollution Control Officer;
- c. Burning is authorized during the dates stated on the permit which shall be for periods no less than thirty (30) days and no greater than one (1) year;
- d. Unless otherwise approved by the Fire Chief having jurisdiction, burning shall be conducted during the hours of one half hour after sunrise until one half hour before sunset. The Linn County Sheriff's Department shall be notified upon such approval by the permit applicant;
- e. Burning is conducted in a safe and reasonable manner so as not to endanger life or property;
- f. Fires must be attended by the permit applicant or his/her agent at all times, this person shall have the burning permit in their possession at the time of burning;
- g. The Air Pollution Control Officer shall have the authority to deny issuance of an Open Burning Permit to any person who has failed to pay the fee for a previously issued Open Burning Permit; who has been previously cited for any violation of this Ordinance and has failed to pay in full all fines, court costs and restitution entered as a judgment against them or who is not current with any Court ordered payment plan for such fines, court costs and restitution. This provision does not limit the Air Pollution Control Officer's power to otherwise collect unpaid fees, fines, court costs and restitution.

# 3. The following types of open burning are exempt and may be conducted without an open burning permit.

- a. Open burning used solely for cooking, heating, and/or other recreational activities. These fires must be no larger than three feet in diameter and must burn charcoal or untreated wood. Wood must also be free of all leaves, needles or other vegetative matter. These fires must comply with §10.7.
- b. Camp fires and outdoor fireplaces burning untreated wood material, when in association with camping out, cooking, or similar related recreational activities provided that these fires comply with all other sections of this Ordinance and are no larger than three feet in diameter.
- c. Fires for the disposal of residential waste, but not to include rubber, tires, asphalt compounds or garbage at dwellings of four family units or less, in which fires are maintained by the occupant of the dwelling and the burning is conducted in an approved container. An approved container shall be any container which has a capacity that does not exceed 55 gallons in volume and has a one inch spaced wire or other suitable spark arresting device for the control of wind blown materials.

No person shall allow, cause or permit fires for the disposal of household rubbish at dwellings of more than four family units.

- d. Paper Seed Bags. The disposal by open burning of paper seed bags resulting from farming activities occurring on the premises. Such open burning shall be limited to areas located at least one-fourth mile from any building inhabited by other than the landowner or tenant conducting the open burning, livestock area, wildlife area, or water source. The amount of paper seed bags that can be disposed of by open burning shall not exceed one day's accumulation or 50 pounds, whichever is less. However, when the burning of paper seed bags causes a nuisance, the Air Pollution Control Officer may take action to secure relocation of the burning operation.
- e. Fire Extinguisher Training. For the purpose of this paragraph, a "training fire" is a fire set for the purpose of conducting a bona fide training of public or industrial employees in fire fighting methods. For the purpose of this subparagraph, "bona fide training" means training that is conducted according to the National Fire Protection Association 1403 Standard on Live Fire Training Evolutions (2002 Edition), or a comparable training fire standard. A training fire may be conducted, provided that all of the following conditions are met:

- 1. The training fire is to be conducted in an approved container not to exceed 55 gallons in volume for educational and safety purposes on the proper use of a fire extinguisher.
- 2. Material(s) used in the training fire shall be limited to diesel fuel, gasoline, or a combination of both.

# 4. Variance from rules. Not SIP approved

- B. Unavailability of Exemptions in Certain Areas. Notwithstanding \$10.10(A)(1)(f) and \$10.10(A)(3)(c) of this ordinance, no person shall allow, cause or permit the open burning of residential waste, including landscape waste and leaves, within the city limits of Cedar Rapids, Hiawatha or Marion, Iowa.
- 1. Notwithstanding §10.10(A)(1)(f), and §10.10(A)(3)(c) of this ordinance, no person shall allow, cause or permit the open burning of residential waste, including landscape waste and leaves, within one half mile of Cedar Rapids, Hiawatha or Marion, Iowa which is classified as Urban Services Residential (USR) district in accordance with the Unified Development Code or otherwise incorporated. The effective date of this rule is January 1, 2009.
- C. Any fire in violation of this Ordinance may be ordered extinguished by any agency designated by the Air Pollution Control Officer. This provision shall not limit the Air Pollution Control Officer from seeking penalties provided for in this Ordinance.

## 10.11 Emissions of Objectionable Odors - Not SIP approved.

# 10.12 Sulfur Compounds

The provisions of this section shall apply to any installation from which sulfur compounds are emitted into the atmosphere.

## 1. Sulfur Dioxide from Use of Fuels.

a. No person shall allow, cause, or permit the emission of sulfur dioxide into the atmosphere in an amount greater than 5 pounds of sulfur dioxide, maximum 2 hour average, per million British Thermal Units of heat input from any solid fuel-burning installation for any combination of fuels burned.

- b. No person shall allow, cause, or permit the emission of sulfur dioxide into the atmosphere in an amount greater than 1.5 pounds of sulfur dioxide, maximum 2 hour average, per million British Thermal Units of heat input from any liquid fuel-burning installation.
- c. No person shall allow, cause, or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.
- 2. Other Processes Capable of Emitting Sulfur Dioxide. No person shall allow, cause, or permit the emission of sulfur dioxide from any process, in excess of 500 parts per million, based on volume. This paragraph shall not apply to devices which have been installed for air pollution abatement purposes where it is demonstrated by the owner of the source that the ambient air quality standards are not being exceeded.
- 3. New Source Performance Standards Sources Capable of Emitting Sulfur Compounds.

All sources subject to New Source Performance Standards shall conform to requirements of §10.9(2) of this Ordinance.

# 10.13 Fugitive Dust

(1) Attainment and Unclassified Areas. A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but are not limited to, the following procedures:

- 1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.
- 2. Application of suitable materials such as, but not limited to, asphalt, oil, water, or chemicals, on unpaved roads, material stockpiles, race tracks, and other surfaces which can give rise to airborne dusts.
- 3. Installation and use of containment or control equipment to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials such as, but not limited to, grain, fertilizer, or limestone.
- 4. Covering, at all times when in motion, open-bodied vehicles transporting material likely to give rise to airborne dusts.
- 5. Prompt removal of earth or other material from paved streets on to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water, or other means.
- 6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.
- (2) Nonattainment Areas. Subparagraph (1) notwithstanding, no person shall allow, cause or permit any visible emission of fugitive dust in a nonattainment area for particulate matter to go beyond the lot line of the property on which a traditional source is located without taking reasonable precautions to prevent emission. Traditional source means a source category for which a particulate emission standard has been established in \$10.9, and includes a quarry operation, haul road, or parking lot associated with the traditional source. This paragraph does not modify the emission standard stated in \$10.9, but rather establishes a separate requirement for fugitive dust from such sources.

For guidance on the types of controls which may constitute reasonable precautions, see "Identification of Techniques for the Control of Industrial Fugitive Dust Emissions\*," adopted by the State of Iowa Environmental Protection Commission on May 19, 1981.

\* Available from the Department

#### 10.14 Excess Emission

# 1. Excess Emission Reporting.

- a. Excess emission during periods of startup, shutdown, or cleaning of control equipment. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to a period or periods aggregating not more than six minutes in any one hour period.
- b. Initial Reports of Excess Emissions. An incident of excess emission (other than an incident of excess emission during startup, shutdown or cleaning) shall be reported to the Air Pollution Control Officer within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in §10.17.

An initial report of excess emission is not required for a source which operates continuous monitoring equipment (as specified in §10.17) if the incident of excess emission continues for less than thirty minutes and does not exceed the applicable visible emission standard by more than ten percent opacity.

The initial report shall be made by electronic mail (e-mail), in person, or by telephone and shall include as a minimum the following:

- (1) The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point;
  - (2) The estimated quantity of the excess emission;
  - (3) The time and expected duration of the excess emission;
  - (4) The cause of the excess emission;
  - (5) The steps being taken to remedy the excess emission;
- (6) The steps being taken to limit the excess emission in the interim period;

- c. Written Report of Excess Emission. A written report of an incident of excess emission shall be submitted to the Air Pollution Control Officer as a follow-up to all required initial reports, within seven days of the onset of the incident and shall include as a minimum the following:
- (1) The identity of the equipment source operation from which the excess emission originated and the associated stack or emission point;
  - (2) The estimated quantity of the excess emission;
  - (3) The time and duration of the excess emissions;
  - (4) The cause of the excess emission;
- (5) The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission;
  - (6) The steps that were taken to limit the excess emission;
- (7) If the owner claims that the excess emission was due to a malfunction, documentation to support this claim.
- d. <u>Excess Emissions</u>. An incident of excess emission, other than an incident during startup, shutdown, or cleaning of control equipment, shall be considered a violation of this ordinance.

If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following a review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the excess emission shall be shut down within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. Additional time may be granted if conditions are such that an eight hour period can be shown to be impractical. In each case the Air Pollution Control Officer shall make this determination after review of the extenuating circumstances and making any on-site inspections as necessary.

In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless the Air Pollution Control Officer shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issues an order that such operation is not in the public interest and requires a process shutdown to commence immediately.

e. Compliance with other paragraphs. Notwithstanding \$10.14(1) (a) to \$10.14(1) (d), a fossil fuel-fired steam generator to which \$10.9(2) (a) (1), \$10.9(2) (a) (26), or \$10.9(2) (a) (55) applies shall comply with \$10.9(2) (a) (1), \$10.9(2) (a) (26), or \$10.9(2) (a) (55).

# 2. Maintenance and Repair Requirements.

- a. <u>Maintenance and repair</u>. The owner or operator of any equipment or control equipment shall:
- (1) Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
- (2) Remedy any cause of excess emission in an expeditious manner.
- (3) Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
- (4) Implement measures contained in any contingency plan prepared in accordance with §10.14(b)(3) below.
- (5) Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdown to the maximum extent possible.
- b. Maintenance Plans. A maintenance plan will be required for equipment or control equipment where in the judgment of the Air Pollution Control Officer, a continued pattern of excess emissions indicative of inadequate operation and maintenance is occurring. The maintenance plan shall include, but not be limited to, the following:

- (1) A complete preventive maintenance schedule, including identification of the persons responsible for inspecting, maintaining and repairing control equipment, a description of items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the replacement parts which will be maintained in inventory for quick replacement;
- (2) An identification of the equipment and air pollution control equipment operating variables that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring and surveillance procedures;
- (3) A contingency plan for minimizing the amount and duration of any excess emissions to the maximum extent possible during periods of such emissions.

# 10.15 Variances Not SIP approved.

#### 10.16 Circumvention

It shall be unlawful to install a device to conceal emissions for the purpose of circumvention of this or other applicable air pollution ordinances. No person, firm, corporation, association, or public agency shall build, erect, install, or use any article, machine, equipment, or other contrivance, the primary purpose of which is to dilute or conceal an air contaminating emission unless it shall result in a reduction in the total release of contaminants to the atmosphere and which alone or in conjunction with other such equipment will bring compliance with the permissible standards set up in this or other applicable ordinances.

- 1. Evidence used in establishing that a violation has or is occurring. Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.
- a. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
- (1) A monitoring method approved for the source and incorporated in an operating permit pursuant to section 10.5;
  - (2) Compliance test methods specified in section 10.17; or

- (3) Testing or monitoring methods approved for the source in a construction permit issued pursuant to section 10.5.
- b. The following testing, monitoring or information-gathering methods are presumptively credible testing, monitoring, or information-gathering methods:
- (1) Any monitoring or testing methods provided in these rules; or
- (2) Other testing, monitoring, or information-gathering methods that produce information comparable to that produced by any rule in subrule 10.16(1) "a" of this subrule.

## 10.17 Testing and Sampling of New and Existing Equipment

- 1. Continuous Monitoring of Opacity from Coal-Fired Steam Generating Units. The owner or operator of any coal-fired or coal-gas-fired steam generating unit with a rated capacity of greater than 250 million BTUs per hour heat input shall install, calibrate, maintain, and operate continuous monitoring equipment to monitor opacity. If an exhaust services more than one steam generating unit as defined in the preceding sentence, the owner has the option of installing opacity monitoring equipment on each unit or on the common stack. Such monitoring equipment shall conform to performance specifications specified in §10.17(9). The Air Pollution Control Officer may require the owner or operator of any coal-fired or coal-gas-fired steam generating unit to install, calibrate, maintain and operate continuous monitoring equipment to monitor opacity whenever the compliance status, history of operations, ambient air quality in the vicinity surrounding the generator or the type of control equipment utilized would warrant such monitoring.
- 2. Reserved
- 3. Reserved
- 4. Continuous Monitoring of Sulfur Dioxide from Sulfuric Acid Plants. The owner or operator of any sulfuric acid plant of greater than 300 tons per day production capacity, the production being expressed as 100 percent acid, shall install, calibrate, maintain and operate continuous monitoring equipment to monitor sulfur dioxide emissions. Said monitoring equipment shall conform to the minimum performance specifications specified in §10.17(9).

- 5. Maintenance of Records of Continuous Monitors. The owner or operator of any facility which is required to install, calibrate, maintain and operate continuous monitoring equipment shall maintain, for a minimum of two years, a file of all information pertinent to each monitoring system present at the facility. Such information must include but is not limited to all emissions data (raw data, adjusted data, and any or all adjusted factors used to convert emissions from units of measurement to units of the applicable standard), performance evaluations, calibrations and zero checks, and records of all malfunctions of monitoring equipment or source and repair procedures performed.
- 6. Reporting of Continuous Monitoring Information. The owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Air Pollution Control Officer, no later than 30 calendar days following the end of the calendar quarter, on forms provided by the Air Pollution Control Officer. This provision shall not excuse compliance with more stringent applicable reporting requirements. All periods of recorded emissions in excess of the applicable standards, the results of all calibrations and zero checks, and performance evaluations occurring during the reporting period, and any periods of monitoring equipment malfunctions or source upsets and any apparent reasons for these malfunctions and upsets shall be included in the report.
- 7. <u>Tests by Owner</u>. The owner of new or existing equipment or the owner's authorized agent shall conduct emission tests to determine compliance with applicable rules in accordance with these requirements.
- 1. General. The owner of new or existing equipment or the owner's authorized agent shall notify the Air Pollution Control Officer in writing not less than 15 days before a required test or before a performance evaluation of a continuous emission monitor to determine compliance with applicable requirements of \$10.9 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the tests and other information as required by the Department. If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. At the Department's request, a pretest meeting shall be held not later than 5 days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than 15 days before the owner or operator

conducts the compliance demonstration. A representative of the Department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the Air Pollution Control Officer in the form of a comprehensive report within six weeks of the completion of the testing.

- b. New or Modified Equipment. Unless otherwise specified by the Department, all new or modified equipment shall be tested by the owner or the owner's authorized agent to determine compliance with applicable emission limits. Tests conducted to demonstrate compliance with the requirement of the rules or a permit shall be conducted within 60 days of achieving maximum production but no later than 180 days of startup, unless a shorter time frame is specified in the permit.
- c. Existing Equipment. The Air Pollution Control Officer may require the owner or the owner's authorized agent to conduct an emission test on any equipment if the Air Pollution Control Officer has reason to believe that the equipment does not comply with applicable requirements. Grounds for requiring such a demonstration of compliance include a modification of control or process equipment, age of equipment, or observation of opacities or other parameters outside the range of those indicative of properly maintained and operated equipment. Testing may be required as necessary to determine actual emissions from a source where that source is believed to have a significant impact on the public health or ambient air quality of an area. The Air Pollution Control Officer shall provide the owner or agent not less than 30 days to perform the compliance demonstration and shall provide written notice of the requirement.
- 8. Tests by Department. Representatives of the Department may conduct separate and additional air contaminant emission tests and continuous monitor performance tests of an installation on behalf of the county and at the expense of the county. Sampling holes, safe scaffolding and pertinent allied facilities, but not instruments or sensing devices, as needed, shall be requested in writing by the Air Pollution Control Officer and shall be provided by and at the expense of the owner of the installation at such points as specified in the request. The owner shall provide a suitable power source to the point or points of testing so that sampling instruments can be operated as required. Analytical results shall be furnished to the owner.
- 9. Methods and Procedures. Stack sampling and associated analytical methods used to evaluate compliance with emission limitations of \$\$10.8, 10.9, 10.12 or a permit condition are as follows:

- 1. Performance test (stack test). A stack test shall be conducted according to EPA reference methods as specified in 40 CFR 51, Appendix M (as amended through December 21, 2010); 40 CFR 60, Appendix A (as amended through September 9, 2010); 40 CFR 61, Appendix B (as amended through October 17, 2000); and 40 CFR 63, Appendix A (as amended through August 20, 2010). The owner of the equipment or the owner's authorized agent may use an alternative methodology if approved by the Department in writing before testing. Each test shall consist of at least three separate test runs. Unless otherwise specified by the Department, compliance shall be assessed on the basis of the arithmetic mean of the emissions measured in the three test runs.
- 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 through September 9, 2010); 40 CFR 60, Appendix F (as amended through September 9, 2010); 40 CFR 75, Appendix A (as amended through March 28, 2011); 40 CFR 75, Appendix B (as amended through March 28, 2011); and 40 CFR 75, Appendix F (as amended through March 28, 2011). The owner of the equipment or the owner's authorized agent may use an alternative methodology for continuous monitoring systems if approved by the Department in writing prior to conducting the minimum performance specification and quality assurance procedures.
- 3. Permit and compliance demonstration requirements. After October 24, 2012, all stack sampling and associated analytical methods used to evaluate compliance with emission limitations of §§10.8, 10.9 or 10.12 or required in a permit issued by the Department pursuant to §§10.4, 10.5 or 567 IAC Chapter 33 shall be conducted using the methodology referenced in this rule. If stack sampling was required for a compliance demonstration pursuant to §§10.8, 10.9 or 10.12 or for a performance test required in a permit issued by the department pursuant to §§10.4, 10.5 or 567 IAC Chapter 33 before October 24, 2012 and the demonstration or test was not required to be completed before October 24, 2012, then the methodology referenced in this subrule applies retroactively.
- 10. Exemptions from Continuous Monitoring Requirements. The owner or operator of any source is exempt if it can be demonstrated that any of the conditions set forth in this section are met with the provision that periodic recertification of the existence of these conditions can be requested.
- 1. An affected source is subject to a new source performance standard promulgated in 40 CFR Part 60 as amended through September 28, 2007.

- a. An affected source is subject to a new source performance standard promulgated in 40 CFR Part 60 as amended through September 28, 2007, as adopted in 567 IAC Chapter 25.
- b. An affected steam generator had an annual capacity factor for calendar year 1974, as reported to the Federal Power Commission, of less than 30 percent, or the projected use of the unit indicates the annual capacity factor will not be increased above 30 percent in the future.
- c. The Air Pollution Control Officer may provide a temporary exemption from the monitoring and reporting requirements during any period of monitoring system malfunction, provided that the source owner or operator shows, to the satisfaction of the Air Pollution Control officer, that the malfunction was unavoidable and is being repaired as expeditiously as practical.
- 11. Extensions. The owner or operator of any source may request an extension of time provided for installation of the required monitor by demonstrating to the Air Pollution Control Officer that good faith efforts have been made to obtain and install the monitor in the prescribed time.
- 12. Continuous monitoring of sulfur dioxide from emission points involved in an alternative emission control program. The owner or operator of any facility applying for an alternative emission control program under 567 IAC22.7(1) that involves the trade-off of sulfur dioxide emissions shall install, calibrate, maintain and operate continuous sulfur dioxide monitoring equipment consistent with EPA reference methods (40 CFR 60, Appendix B, as amended through September 28, 2007). The equipment shall be operational within three months of EPA approval of an alternative emission control program.

  13. Continuous Emission Monitoring Under the Acid Rain Program. Not SIP approved.
- 13. <u>Continuous Emission Monitoring Under the Acid Rain Program</u>
  Not SIP approved.

#### 10.18 Analysis Fees

Whenever the Air Pollution Control Officer determines that an analysis of the emissions from any source is necessary to determine the extent and amount of pollutants being discharged into the atmosphere which cannot be determined by visual observation a collection of samples shall be ordered and the analysis made by qualified personnel of the Linn County Public Health Department Laboratory or by another recognized laboratory. The cost for collecting samples, making the analysis and preparing the necessary reports shall be charged against the owner or operator of such premises.

#### 10.19 Submission of Information

The Air Pollution Control Officer may require information about points of emission of air contaminants or the process creating the air contaminants, whether by stack, duct, flue, equipment, or by any other means, when such information is necessary for the conduct of the work of the Air Pollution Control Officer. A period of thirty (30) days shall be allowed for the submission of such information. However, in case of emergency, the Air Pollution Control Officer may designate any lesser time which is necessary under the circumstances.

#### 10.20 Public Records and Fair Information Practices

Information received by the Board of Health or the Department shall be made available to the public or be granted confidential treatment in accordance with the provisions of Iowa Code Chapters 22 and 455B.

Anyone making a request for reproduction of the Department's records will pay for services at rates established by resolution of the Linn County Board of Health.

## 10.21 Prevention of Air Pollution Emergency Episodes

#### 1. Episode Criteria.

a. Evaluation. Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the Air Pollution Control Officer determines that the meteorological conditions are such that the accumulation of air contaminants in any place is reaching, or has reached, levels which could, if sustained or exceeded, lead to a substantial threat to the health of the public.

- (1) Air Pollution Forecast. Initial consideration of air pollution episode activities will be activated by receipt from the National Weather Service of an Air Stagnation Advisory indicating that meteorological conditions conducive to an air pollution episode may be imminent, along with prediction of the duration and termination of such conditions. Receipt of such an advisory shall be the basis for activities such as, but not limited to, increased monitoring of air contaminants in the area involved.
- b. Declaration. In making determinations for the declaration of an air pollution episode condition, the Air Pollution Control Officer will be guided by the criteria stated in the following paragraphs.
- (1) Air Pollution Alert. An alert will be declared when any one of the following levels is reached at any monitoring site, and when meteorological conditions are such that the contaminant concentration can be expected to remain at those levels for twelve (12) or more hours, or increase, unless control actions are taken:
- (A) Sulfur Dioxide: 800 micrograms per cubic meter (0.3 ppm), 24 hour average;
- (B) Fine Particulate Matter: 350 micrograms per cubic meter, 24 hour average;
- (C) Sulfur Dioxide and Particulate Matter Combined: Product of micrograms sulfur dioxide per cubic meter (24 hour average) and micrograms particulate matter per cubic meter (24 hour average) equal to 65,000;
- (D) Carbon Monoxide: 17 milligrams per cubic meter (15 ppm), 8 hour average;
- (E) Oxidants (ozone): 200 micrograms per cubic meter (0.1 ppm), 1 hour average;
- (F) Nitrogen Dioxide: 1,130 micrograms per cubic meter (0.6 ppm), 1 hour average, or 282 micrograms per cubic meter (0.15 ppm), 24 hour average.
- (2) Air Pollution Warning. A warning will be declared when any one of the following levels is reached at any monitoring site and when meteorological conditions are such that the contaminant concentrations can be expected to remain at those levels for twelve (12) or more hours, or increase, unless control actions are taken:
- (A) Sulfur Dioxide: 1,600 micrograms per cubic meter (0.6 ppm), 24 hour average;

- (B) Fine Particulate Matter: 420 micrograms per cubic meter, 24 hour average;
- (C) Sulfur Dioxide and Particulate Matter Combined: Products of micrograms sulfur dioxide per cubic meter (24 hour average) and micrograms particulate matter per cubic meter (24 hour average) equal to 261,000;
- (D) Carbon Monoxide: 34 milligrams per cubic meter (30 ppm), 8 hour average;
- (E) Oxidants (ozone): 800 micrograms per cubic meter (0.4 ppm), 1 hour average;
- (F) Nitrogen Dioxide: 2,260 micrograms per cubic meter (1.2 ppm), 1 hour average, or 565 micrograms per cubic meter (0.3 ppm), 24 hour average.
- (3) Air Pollution Emergency. An emergency shall be declared when any one of the following levels is reached at any monitoring site and when meteorological conditions are such that this condition can be expected to continue for twelve (12) or more hours:
- (A) Sulfur Dioxide: 2,100 micrograms per cubic meter (0.8 ppm), 24 hour average;
- (B) Fine Particulate Matter: 500 micrograms per cubic meter, 24 hour average;
- (C) Sulfur Dioxide and Particulate Matter Combined: Product of micrograms sulfur dioxide per cubic meter (24 hour average) and micrograms particulate matter per cubic meter (24 hour average) equal to 393,000;
- (D) Carbon Monoxide: 46 milligrams per cubic meter (40 ppm), 8 hour average;
- (E) Oxidants (ozone): 1,200 micrograms per cubic meter (0.6 ppm), 1 hour average;
- (F) Nitrogen Dioxide: 3,000 micrograms per cubic meter (1.6 ppm), 1 hour average, or 750 micrograms per cubic meter (0.4 ppm), 24 hour average.

(4) Termination. Once declared, any status reached by application of these criteria will remain in effect until the criteria for that level are no longer met. As meteorological factors and air contaminants change, an appropriate change in episode level will be declared.

# 2. Preplanned Abatement Strategies.

- a. Planned Strategies. Standby plans shall be designed to reduce or eliminate emissions of air contaminants in accordance with the objectives set forth in Tables III-V, which are made a part of this section.
- 1) Plan Preparation. Any person responsible for the operation of a source of air contaminants as set forth in Tables III-V shall prepare standby plans for reducing the emission of air contaminants, which shall be implemented upon the declaration of an air pollution episode and continued for the duration of the declared episode.
- (A) Any person responsible for the operation of a source of air contaminants not set forth under this paragraph shall, when requested by the Air Pollution Control Officer in writing, prepare standby plans for reducing the emission of such air contaminant or contaminants during periods of an air pollution episode, as specified in this section.
- 2) Plan Content. Standby plans as required under this section shall be in writing. Each standby plan shall identify the sources of air contaminants, the approximate amount of reduction of contaminants, and a brief description of the manner in which the reduction will be achieved during an air pollution alert, air pollution warning, or air pollution emergency, as specified in this section.
- 3) Review of Plans. Standby plans as required by this section shall be submitted to the Air Pollution Control Officer. Each standby plan shall be subject to review. If, in the opinion of the Air Pollution Control Officer, a standby plan does not provide for adequate reduction of emissions, the Air Pollution Control Officer may disapprove such plan, state the reasons for disapproval, and order the preparation of an amended standby plan within a time period specified in the order.
- 4) Availability. During a declared air pollution episode, standby plans as required by this section shall be made available on the premises to any person authorized to enforce this ordinance.

# 3. Actions During Episodes.

- a. Emissions Reduction Activities. Any person responsible for the operation of a source of air contaminants as set forth in Tables III-V herein, whose source is located within the area involved, shall follow the actions specified below during periods of an air pollution alert, air pollution warning or air pollution emergency as may be declared.
- (1) Air Pollution Alert. When an air pollution alert has been declared, all persons in the area involved responsible for the operation of a source of air contaminants as set forth in Table III herein, shall take all air pollution alert actions as required for such sources of air contaminants, and persons responsible for the operation of specific sources set forth in Table III herein, shall put into effect the preplanned abatement strategy for an air pollution alert.
- (2) Air Pollution Warning. When an air pollution warning has been declared, all persons in the area involved responsible for the operation of a source of air contaminants as set forth in Table IV, herein, shall take all air pollution warning actions as required for such sources of air contaminants, and persons responsible for the operation of specific sources set forth in Table IV herein, shall put into effect the preplanned abatement strategy for an air pollution warning.
- (3) Air Pollution Emergency. When an air pollution emergency has been declared, all persons in the area involved responsible for the operation of a source of air contaminants as set forth in Table V herein, shall take all air pollution emergency actions as required for such sources of air contaminants, and persons responsible for the operation of specific sources set forth in Table V herein, shall put into effect the preplanned abatement strategy for an air pollution emergency.
- (4) Special Conditions. When the Air Pollution Control Officer determines that a specific episode level has been reached at one or more monitoring sites solely because of emissions from a limited number of sources, he shall notify the persons responsible for such sources that the preplanned abatement strategy of Tables III, IV, and V, or the standby plans, are required insofar as they apply to such sources, and such actions shall be put into effect until notified that the criteria of the specified level are no longer met.

#### TABLE III

## ABATEMENT STRATEGIES EMISSION REDUCTION ACTIONS ALERT LEVEL

### General

- 1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
- 2. The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12:00 noon and 4:00 p.m.
- 3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12:00 noon and 4:00 p.m.
- 4. Persons operating motor vehicles should eliminate all unnecessary operations.

## Source Curtailment

Any person responsible for the operation of a source of air contaminants listed below shall take all required control actions for this alert level.

Source of Air Pollution	Control Action
1. Coal or oil-fired	a. Substantial reduction by utilization of
electric power generating	fuel having low ash and sulfur content.
facilities.	b. Maximum utilization of mid-day (12:00
	noon to 4:00 p.m.) atmospheric turbulence
	for boiler lancing and soot blowing.
	c. Substantial reduction by diverting
	electric power generating to facilities
	outside of alert level.
2. Coal and oil-fired	a. Substantial reduction by utilization of
process steam generating	fuels having low ash and sulfur content.
facilities.	b. Maximum utilization of mid-day (12:00
	noon to 4:00 p.m.) atmospheric turbulence
	for boiler lancing and soot blowing.
	c. Substantial reduction of steam load
	demands consistent with continuing plant
	operation.
3. Manufacturing	a. Substantial reduction of air
industries of the	contaminants from manufacturing operations
following classification:	by curtailing, postponing, or deferring
	production and all operation.
Primary Metals	b. Maximum reduction by deferring trade
Industries	waste disposal operations which emit solid
Petroleum Refining	particles, gas vapors, or malodorous
Operations	substances.

Source of Air Pollution	Control Action
Chemical Industries	c. Maximum reduction of heat load demands
Mineral Processing	for processing.
Industries	d. Maximum utilization of mid-day (12:00
Paper and Allied	noon to 4:00 p.m.) atmospheric turbulence
Products	for boiler lancing and soot blowing.
Grain Industry	

### TABLE IV

ABATEMENT STRATEGIES EMISSION REDUCTION ACTIONS WARNING LEVEL

# <u>General</u>

- 1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
- 2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited
- 3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12:00 noon and 4:00 p.m.
- 4. Persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.

# Source Curtailment

Any person responsible for the operation of a source of air contaminants listed below shall take all required control actions for this warning level.

Source of Air Pollution	Control Action
1. Coal or oil-fired electric	a. Substantial reduction by
power generating facilities.	utilization of fuels having lowest
	ash and sulfur content.
	b. Maximum utilization of mid-day
	(12:00 noon to 4:00 p.m.) atmospheric
	turbulence for boiler lancing and
	soot blowing.
	c. Maximum reduction by diverting
	electric power generation to
	facilities outside the warning area.
2. Coal and oil-fired process	a. Maximum reduction by utilization
steam generating facilities.	of fuels having lowest ash and sulfur
	content.

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Source of Air Pollution	Control Action
	<ul> <li>b. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.</li> <li>c. Making ready for use a plan of action to be taken if an emergency develops.</li> </ul>
3. Manufacturing industries which require considerable lead time for shutdown including the following classifications:	a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operation.
Primary Metal Industries Petroleum Refining Operations Chemical Industries Paper and Allied Products Glass Industries	b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances.  c. Maximum reduction of heat load demands for processing.  d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
4. Manufacturing industries which require relatively short lead times for shutdown including the following classifications:  Primary Metal Industries Chemical Industries	a. Elimination of air contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring, production and allied operations to the extent possible without causing injury to persons or damage to equipment.  b. Elimination of air contaminants
Mineral Processing Industries Grain Industries	from trade waste disposal processes which emit solid particles, gases, vapors or malodorous substances.  c. Maximum reduction of heat load demands for processing.  d. Maximum utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

### TABLE V

## ABATEMENT STRATEGIES EMISSION REDUCTION ACTIONS EMERGENCY LEVEL

## General

- 1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
- 2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.
- 3. All places of employment described below shall immediately cease operations:
  - a. Mining and quarrying of nonmetallic materials.
- b. All construction work except that which must proceed to avoid emergent physical harm.
- c. All manufacturing establishments except those required to have in force an air pollution emergency plan.
- d. All wholesale trade establishments, i.e., places of business primarily engaged in selling merchandise to retailers or industrial, commercial, institutional or professional users or to other wholesalers or those acting as agents in buying merchandise for or selling merchandise to such persons or companies, except those engaged in the distribution of drugs, surgical supplies and food.
- e. All offices of local, county, and state government including authorities, joint meetings, and other public bodies excepting such agencies which are determined by the chief administrative officer of local, county, or state government, authorities, joint meetings, and other public bodies to be vital for public safety and welfare and the enforcement of the provisions of this Ordinance.
- f. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food.
- g. Banks, credit agencies other than banks, securities and commodities brokers, dealers, exchanges and services, offices of insurance carriers, agents and brokers, and real estate offices.
- h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments, photographic studios, beauty shops, barber shops, shoe repair shops.

- i. Advertising offices, consumer credit reporting, adjustment and collection agencies, duplicating, addressing, blueprinting, photocopying, mailing, mailing list and stenographic services, equipment rental services, and commercial testing laboratories.
  - j. Automotive repair, automobile services, and garages.
- k. Establishments rendering amusement and recreational services including motion picture theaters.
- l. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries.
- 4. All commercial and manufacturing establishments not included in this Ordinance will institute such actions as will result in maximum reduction of air contaminants from their operations by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.
- 5. The use of motor vehicles is prohibited except in emergencies with the approval of local or state police.

# Source Curtailment

Any person responsible for the operation of a source of air contaminants listed below shall take all required control actions for this emergency level.

Sources of Air Pollution	Control Action
1. Coal or oil-fired electric	a. Maximum reduction by utilization
power generating facilities.	of fuels having lowest ash and sulfur
	content.
	b. Maximum utilization of mid-day
	(12:00 noon to 4:00 p.m.) atmospheric
	turbulence for boiler lancing and
	soot blowing.
	c. Maximum reduction by diverting
	electrical power generation to
	facilities outside of emergency area.
2. Coal and oil-fired process	a. Maximum reduction by reducing heat
steam generating facilities.	and steam demands to absolute
	necessities consistent with
	preventing equipment damage.
	b. Maximum utilization of mid-day
	(12:00 noon to 4:00 p.m.) atmospheric
	turbulence for boiler lancing and
	soot blowing.
	c. Taking the action called for in
	emergency plan.
3. Manufacturing industries	a. Elimination of air contaminants
of the following	from manufacturing operations by
classifications:	ceasing, curtailing, postponing or
	deferring production and allied
Primary Metals Industries	operations to the extent possible
Petroleum Refining	without causing injury to persons or
Operations Chemical Industries	damage to equipment.  b. Elimination of air contaminants
Paper and Allied Products	
Mineral Processing	from trade waste disposal processes which emit solid particles, gases,
Industries	vapors, or malodorous substances.
Grain Industries	c. Maximum reduction of heat load
	demands for processing.
	d. Maximum utilization of mid-day
	(12:00 noon to 4:00 p.m.) atmospheric
	turbulence for boiler lancing and
	soot blowing.

### 10.22 Enforcement

It shall be the duty of the Air Pollution Control Officer to enforce the provisions of this Ordinance. For the purpose of enforcement of this Ordinance, the Air Pollution Control Officer or a duly authorized representative, after presentation of credentials, is hereby empowered to enter the premises of any dwelling, industry, or other public or private place now or hereafter established or located within Linn County, Iowa, for the purpose of determining whether or not said premises are operating in violation of this Ordinance.

Specific powers and duties of the Air Pollution Control Officer related to this Ordinance shall include the power to:

- 1. Supervise the execution of this Ordinance pertaining to air pollution.
- 2. Institute complaints against all persons violating any provisions of this Ordinance; institute necessary legal proceedings to prosecute violations of this Ordinance; issue citations to persons committing county infractions and compel the prevention and abatement of air pollution or nuisance arising therefrom.
- 3. Approve or disapprove, in accordance with the requirements of this Ordinance, plans for fuel-burning and air pollution control equipment.
- 4. Make or supervise inspections and tests of existing and newly installed, constructed, reconstructed or altered fuel-burning or refuse-burning equipment and process control equipment to determine if there is compliance with the provisions of this Ordinance.
- 5. Prepare and present to the Board of Health and the Linn County Board of Supervisors for their approval or disapproval proposals for Ordinances and additions or revisions to this Ordinance or any ordinance pertaining to air pollution control.
- 6. Review those matters related to air pollution referred by other county, state, or federal agencies and make recommendations.
- 7. Submit monthly reports concerning permits and variances issued, status of air quality and other information of general interest required by state or federal law.
- 8. Do any and all acts which may be necessary for the successful enforcement of the provisions of this Ordinance.

## 10.23 Sealing

After three (3) notifications of the same violation of this Ordinance within a twelve (12) month period, in respect to the emission of air contaminants from the same source, a violator shall be notified by certified mail to show cause before the Linn County Board of Health within thirty (30) days why the offending equipment shall not be sealed. The notice shall be directed to the last address of the person to be notified, or if the person or their whereabouts is unknown, then the notice shall be posted on or near the premises at which the violations have occurred.

The violator or an agent or attorney representing the violator may appear before the Linn County Board of Health and be heard. The Linn County Board of Health shall then determine whether or not to direct the Air Pollution Control Officer to seal the equipment until such time as corrective measures are taken.

It shall be unlawful for any person to break a seal that has been duly affixed by the Air Pollution Control Officer or an authorized representative unless authorized in writing by the Air Pollution Control Officer to do so after the corrective measures have been taken. Any equipment sealed under this section of the Ordinance shall remain sealed during any appeal process.

Nothing herein shall limit the Air Pollution Control Officer's power to enforce the penalty provisions of this ordinance in lieu of or in addition to sealing equipment which is being operated in violation of this Ordinance.

# 10.24 Penalty Not SIP approved.

### 10.25 Jurisdiction

The provisions of this Ordinance shall apply throughout Linn County, Iowa.

### 10.26 Repealer

All ordinances or parts of ordinances in conflict with the provisions of this Ordinance are hereby repealed.

## 10.27 Severability Clause

If any section, provision, or other part of this Ordinance shall be adjudged invalid or unconstitutional said adjudication shall not affect the validity of the Ordinance as a whole or any section, provision, or other part thereof not adjudged invalid or unconstitutional.

# 10.28 When Effective

This ordinance became effective on upon publication Approved by the Linn County Board of Supervisors the  $17^{\rm th}$  day of July, 2013.

Published in the Cedar Rapids Gazette on July 24, 2013.

### EPA Rulemakings

CFR: 40 C.F.R. 52.820(c)(50)(i)(A)

FRM: 54 FR 33526 (8/15/89); correction 55 FR 26690 (6/29/90)

PRM: None
State Submission: 2/3/88
State Proposal: Unknown
State Final: 9/2/87
APDB File: IA-21

Description: The EPA approved the Linn County rules as part of the Iowa SIP. The EPA approved Section 10.1, Definitions, with the exception of the definition of "particulate matter" which is consistent with the EPA's definition of  $PM_{10}$ . Sections 10.2 and 10.4 were approved. Section 10.3 was approved, with the provision that permits affecting Iowa's SIP will be submitted and approved by the EPA as a SIP revision. Until Linn County revises its definition of  $PM_{10}$  and the EPA approves it, the state is required to be responsible for approving permits of  $PM_{10}$  emission sources in Linn County.

CFR: 40 C.F.R. 52.820(c)(66)(i)(B)

FRM: 63 FR 5268 (2/2/98) PRM: 63 FR 5339 (2/2/98)

State Submission: 4/2/97 State Proposal: N/A

State Final: Linn County Ordinance # 6-2-1997 (effective 3/7/97)

APDB File: IA-42

Description: The EPA approved updated regulations for the Linn County Health Department which reflect revisions adopted by the Iowa Department of Natural Resources in the Iowa Administrative Code. These revisions include provisions such as definitions, permit exemptions, visible opacity, and open burning.

CFR: 40 C.F.R. 52.820(c) FRM: 70 FR 48073 (08/16/2005) PRM: 70 FR 48093 (08/16/2005)

State Submission: 04/13/2005

State Final: Linn County Ordinance # 1-2-2005 (effective 3/1/2005)

APDB File: IA-88; edocket No. R07-OAR 2005-IA-0003

Description: The EPA approved updated regulations for the Linn County Air Quality Ordinance (Chapter 10) which reflect revisions adopted by the Iowa Department of Natural Resources in the Iowa Administrative Code. These revisions include additions, changes and deletions to definitions, changes to locally required permits, particulate matter, training fires, sulfur compounds, fugitive dust, testing and sampling of new and existing equipment, and open burning penalties.

CFR: 40 C.F.R. 52.820(c) FRM: 79 FR 62852 (10/21/14) PRM: 79 FR 62934 (10/21/14)

State Submission: 2008, 2009, 2011, 2012 and 2013
State Final: Linn County Ordinance Chapter 10

APDB File: IA-135, 147, 157 163 EPA-R07-OAR-2014-0300

Description: The Iowa Department of Natural Resources (IDNR) requested that EPA approve revisions to its State Implementation Plan (SIP) for the Linn County Air Quality Ordinance (Chapter 10) for revisions dated 2008, 2009, 2011, 2012 and 2013. The SIP revisions were sent to EPA in a timely manner with no known approvability issues. Contemporaneous with the SIP submittals, many changes were being made to the Federal rules. Efforts by Linn County were made to accommodate the revision changes in an attempt to accommodate EPA's position.

The Linn County SIP revisions from 2008-2012 were not acted on by EPA. In an effort to reflect the current state of the Linn County Air Quality Ordinance, IDNR sent a letter to EPA on August 15, 2014, requesting that only the revisions set forth in their attached correspondence be acted upon. Items not included in the revisions no longer have to be acted on and are the difference between the originals and revised request. However, there are three items included in the August 15, 2014, IDNR correspondence that will not be acted on due to approvability issues: Major stationary source; Regulated New Source Review (NSR) pollutant, and Startup.

CFR: 40 C.F.R. 52.820(d) FRM: 80 FR 44870 (7/28/2015) PRM: 80 FR 44922 (7/28/2015)

State Submission: April 24, 2015; received at EPA May 4, 2015 State Final: January 30, 2015 (date approved by Linn County)

APDB File: IA-171; EPA-R07-OAR-2015-0357

Description: EPA is approving the requested revisions to the Iowa SIP relating to the following Linn County Air Quality Division regulations: Chapter 10.1 "Purpose and Ambient Air Quality Standards"; Chapter 10.2 "Definitions"; Chapter 10.5 "Locally Required Permits"; Chapter 10.6 "Permit Fees"; Chapter 10.8 "Emissions from Fuel-Burning Equipment"; Chapter 10.12 "Sulfur Compounds"; Chapter 10.13 "Fugitive Dust," and, Chapter 10.17 "Testing and Sampling of New and Existing Equipment."

In order for the local program's "Air Quality Ordinance" to be incorporated into the Federally-enforceable SIP, on behalf of the local agency, the state must submit the formally adopted regulations and control strategies, which are consistent with the state and Federal requirements, to EPA for inclusion in the SIP.

Consistent with previous Linn County SIP actions, the following is a list of provisions in the Linn County Air Quality Ordinance that have, historically, not been approved into the SIP: 10.2 - definitions of Anaerobic Lagoon, Biomass, Chemical processing plants (ethanol production facilities that produce ethanol by natural fermentation included in NAICS code 325193 or 312140 are not included in this definition); Federally Enforceable; Greenhouse Gases, Maximum Achievable Control Technology, and MACT floor. 10.4(1) Title V Permits; 10.5(9) "b" Locally Required Permits; Exemptions from the Authorization to Install Permit to Operate Requirements; 10.8(2)"b" Emissions from Fuel-Burning Equipment; Emission Limitation; 10.8(3) Emissions from Fuel-Burning Equipment; Exemptions for Residential Heaters Burning Solid Fuels; 10.8(4) Emissions from Fuel-Burning Equipment; Nuisance Conditions for Fuel Burning Equipment; 10.9(2) NSPS; 10.9(3) Emission Standards for HAPS; 10.9(4) Emission Standards for HAPS Source Categories; 10.10(4) Variance from rules; 10.11 Emission of objectionable odors; 10.15 Variances; 10.17(13) Continuous Emissions Monitoring from Acid Rain Program, and 10.24 Penalty.

#### Difference Between the State and EPA-Approved Regulation

The following definitions are not SIP-approved in Chapter 10.2; Anaerobic lagoon, Biomass, Chemical processing plants (ethanol production facilities that produce ethanol by natural fermentation included in NAICS code 325193 or 312140 are not included in this definition); Federally Enforceable; Greenhouse gases; Maximum Achievable Control Technology (MACT); MACT floor; Major modification; Significant is approved, however, PM2.5 is not included in the definition of "significant." The following sections are not SIP approved: 10.4(1), Title V Permits; 10.5(9) "b" Locally Required Permits; Exemptions from the Authorization to Install Permit to Operate Requirements; 10.8(2) "b" Emissions From Fuel-Burning Equipment; Exemptions for Residential Heaters Burning Solid Fuels; 10.8(4) Emissions from Fuel-Burning Equipment; Nuisance Conditions for Fuel Burning Equipment; 10.9(2), NSPS; 10.9(3), Emission Standards for HAPs; 10.9(4), Emission Standards for HAPs for Source Categories; 10.10(4) Variance from rules; 10.11, Emission of Objectionable Odors; 10.15, Variances, 10.17(13) Continuous Emissions Monitoring from Acid Rain Program, and 10.24, Penalty.