NEBRASKA ADMINISTRATIVE CODE

Title 129 - Department of Environmental Quality

Chapter 1 - DEFINITIONS

Definitions included here apply to the state regulations in this Title and to the Appendices. Unless otherwise defined, or a different meaning is clearly required by context, the following words and phrases, as used in this Title, shall have the following meanings:

001 "Act" means the Clean Air Act, as amended (42 U.S.C. 7401 et seq.).

002 “Actual emissions” for purposes other than the Prevention of Significant Deterioration program, means the actual rate of emissions of a pollutant from an emissions unit as determined below:

002.01 In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during the preceding year and which is representative of normal source operation. The Director shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, existing control equipment, and types of materials processed, stored, or combusted during the selected time period.

002.02 The Director may presume that the source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

002.03 For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

003 "Actual emissions", for purposes of the Prevention of Significant Deterioration program, means the actual rate of emissions of a regulated NSR pollutant from an emissions unit as determined in accordance with sections 003.01 through 003.03 except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a Plantwide Applicability

Limitation (PAL) under Chapter 19, section 011. Instead, “baseline actual emissions” and “projected actual emissions” shall apply for those purposes.

003.01 In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Director shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, existing control equipment, and types of materials processed, stored, or combusted during the selected time period.

003.02 The Director may presume that the source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

003.03 For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

004 “Actuals PAL” for a major stationary source means a Plantwide Applicability Limitation (PAL) based on the baseline actual emissions of all emissions units at the source, that emit or have the potential to emit the PAL pollutant.

005 "Administrator" means the Administrator of the United States Environmental Protection Agency or his or her designee.

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

007 "Affected source" means a source that includes one or more affected units.

008 "Affected States" means all States that:

008.01 Are one of the following contiguous States: Colorado, Iowa, Kansas, Missouri, South Dakota, and Wyoming, and in the judgment of the Director

may be affected by emissions from a facility seeking a Class I permit, modification, or renewal; or

008.02 Are a contiguous State within 50 miles of the permitted source.

009 "Affected unit" means a unit that is subject to emission reduction requirements or limitations under Chapter 26.

010 ~~Reserved~~. "Air contaminant" or "Air contamination" means the presence in the outdoor atmosphere of any dust, fumes, mist, smoke, vapor, gas, or other gaseous fluid, or particulate substance differing in composition from or exceeding in concentration the natural components of the atmosphere.

011 "Air curtain incinerator" means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor.

012 "Air pollutant" or "air pollution" means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in such quantities and of such duration as are or may tend to be injurious to human, plant or animal life, property, or the conduct of business.

013 "Air pollution control agency" means any of the following:

013.01 The Department designated by statute as the official state air pollution control agency for purposes of Neb. Rev. Stat. Sections 81-1501 to 81-1532;

013.02 An agency established by two or more states and having substantial powers or duties pertaining to the prevention and control of air pollution;

013.03 A city, county, or other local government health authority; or in the case of any city, county, or other local government in which there is an

agency other than the health authority charged with responsibility for enforcing ordinances or laws relating to the prevention and control of air pollution, such other agency; or

013.04 An agency of two or more municipalities located in the same state or in different states and having substantial powers or duties pertaining to the prevention and control of air pollution.

014 "Air Quality Control Region" means a region designated by the Governor, with the approval of the Administrator, for the purpose of assuring that national primary and secondary ambient air quality standards will be achieved and maintained. Within one year after the promulgation of a new or revised National Ambient Air Quality Standard, the Governor must designate each region as non-attainment, attainment, or unclassifiable. The Administrator must approve the designations.

015 "Allowable emissions" means

015.01 For a stationary source, the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

015.01 A The applicable standards set forth in 40 CFR Parts 60 (Standards of Performance for New Stationary Sources) or Parts 61 or 63 (National Emission Standards for Hazardous Air Pollutants);

015.01B Any applicable State Implementation Plan emissions limitation including those with a future compliance date; or

015.01C The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

015.02 For a Plantwide Applicability Limitation (PAL), the definition is the same as in section 015.01 except as this definition is modified according to sections 015.02A and 015.02B:

015.02A The allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.

015.02B An emissions unit's potential to emit shall be determined using the definition in section 112 except that the words "or enforceable as a practical matter" should be added after "federally enforceable".

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

017 "AP-42" refers to the *Compilation of Air Pollutant Emission Factors*, published by the EPA Office of Air Quality Planning and Standards. It contains emission factors and process information for more than 200 air pollution source categories.

018 "Applicable requirement" means all of the following as they apply to emissions units in a source required to obtain an operating permit, including requirements that have been promulgated and approved by the Council through rule-making at the time of issuance but have future-effective compliance dates:

018.01 Any standard or other requirement provided for in the applicable implementation plan that implements the relevant requirements of the Act, including any revisions to that plan promulgated in 40 CFR part 52;

018.02 Any term or condition of any ~~pre~~construction permits;

018.03 Any standard or other requirement under Chapter 18 relating to standards of performance for new stationary sources;

018.04 Any standard or other requirement established pursuant to Section 112 of the Act and regulations adopted by the Council in Chapters 23, 27 and 28 relating to hazardous air pollutants listed in Appendix II or Appendix III;

018.05 Any standard or other requirement of the acid rain program under Chapter 26;

018.06 Any requirements established under Chapter 31 or pursuant to any permit or order issued by the Director under this Title;

018.07 Any standard or other requirement governing solid waste incineration under Chapter 18 or pursuant to Section 129(e) of the Act and regulations adopted by the Council;

018.08 Any standard or other requirement for consumer and commercial products established under Section 183(e) of the Act and regulations adopted by the Council;

018.09 Any standard or other requirement for tank vessels established under Section 183(f) and regulations adopted by the Council;

018.10 Any standard or other requirement to protect stratospheric ozone as promulgated pursuant to Title VI of the Act and regulations adopted by the Council; and

018.11 Any national ambient air quality standard or increment or visibility requirement under the Prevention of Significant Deterioration Program as defined in Chapter 1, but only as it would apply to temporary sources permitted pursuant to Chapter 10.

018.12 "Applicable requirements under the Act" means federal regulations promulgated pursuant to the Clean Air Act, as amended, which have not been considered and adopted by the Council.

019 "Area source" means:

019.01 For the purposes of Class I permits under Chapter 5, 001.01C, any stationary source of hazardous air pollutants that is not a major source and as more particularly defined by National Emission Standards for Hazardous Air Pollutants promulgated under 40 CFR Part 63 and adopted by the Council.

019.02 For all other purposes, any small residential, governmental, institutional, commercial, or industrial fuel combustion operation; on-site waste disposal facility, vessels, or other transportation facilities; or other miscellaneous sources, as identified through inventory techniques approved by the Director.

019.03 Area source shall not include motor vehicles or nonroad vehicles.

020 "Baseline actual emissions" has the definition given to it in Chapter 19, section 005.

021 "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1)(D) or (E) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than one microgram per cubic meter (annual average) of the pollutant for which the minor source baseline date is established.

022 "Baseline concentration" means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date.

022.01 A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

022.01A The actual emissions, as defined in section 002, representative of sources in existence on the applicable minor source baseline date, except as provided in section 022.02; and

022.01B The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

022.02 The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

022.02A Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and

022.02B Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

023 "Begin actual construction" means in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

024 "Best Available Control Technology" or "BACT", for purposes of the Prevention of Significant Deterioration (PSD) program as defined in Chapter 1. means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the Director, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combination techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the Director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

“Best Available Control Technology” or “BACT”, for purposes other than the PSD program, means an emission limitation or a design, equipment, work practice, operational standard or combination thereof, which results in the greatest degree of reduction of a pollutant, as determined by the Director to be achievable by a source, on a case-by-case basis, taking into account energy, public health, environmental and economic impacts and other costs.

025 "Building, structure, or facility", for purposes other than the Prevention of Significant Deterioration program, means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

026 "Building, structure, facility, or installation", for purposes of the Prevention of Significant Deterioration program, means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

027 "Class I operating permit" means any permit or group of permits covering a Class I source that is issued, renewed, amended, or revised pursuant to this Title.

028 "Class I source" means any source subject to the Class I permitting requirements of Chapter 5.

029 "Class II operating permit" means any permit or group of permits covering a Class II source that is issued, renewed, amended, or revised pursuant to this Title.

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030 "Class II source" means any source subject to the Class II permitting requirements of Chapter 5.

031 "Clean lumber" means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.

~~031~~ 032 "Commence" as applied to construction, reconstruction, or modification of a stationary source means that the owner or operator has all necessary preconstruction approvals and either has:

> ~~031.01~~ 032.01 Begun, or caused to begin, a continuous program of physical on-site construction of the source to be completed within a reasonable time; or
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> ~~031.02~~ 032.01 Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.

~~032~~ 033 "Complete" means, in reference to an application for a permit, that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the Department from requesting or accepting any additional information.

~~033~~ 034"Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions (a change in "emissions" for the Prevention of Significant Deterioration Program).

~~034~~ 035 "Consumer Price Index" or "CPI" means the average of the Consumer Price Index for all urban consumers published by the United States Department of Labor at the close of the twelve-month period ending on August 31 of each year.

~~035~~036"Continuous emissions monitoring system (CEMS)" means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

~~036~~037 "Continuous emissions rate monitoring system (CERMS)" means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

~~037~~ 038 "Continuous parameter monitoring system (CPMS)" means all of the equipment necessary to meet the data acquisition and availability requirements of the Prevention of Significant Deterioration program, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O_2 or CO_2 concentrations), and to record average operational parameter value(s) on a continuous basis.

~~038~~ 039 "Control" and "controlling" means prohibition of contaminants as related to air, land, or water pollution.

~~039~~040"Control strategy" means a plan to attain National Ambient Air Quality Standards or to prevent exceeding those standards.

~~040~~ 041 "Council" means the Environmental Quality Council.

~~041~~042"Department" means the Department of Environmental Quality.

~~042~~ 043 "Designated representative" means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with Subpart B of 40 CFR part 72, to represent and legally bind each owner and operator, as a matter of federal law, in matters pertaining to the Acid Rain Program. Whenever the term "responsible person" is used in this Title, it shall be deemed to refer to the "designated representative" with regard to all matters under the Acid Rain Program.

~~043~~ 044 “Deviation” means a departure from an indicator range or work practice for monitoring, consistent with any averaging period specified for averaging the results of the monitoring.

~~044~~ 045 "Director" means the Director of the Department of Environmental Quality or his or her designee.

~~045~~046 “Draft permit” means the version of a permit for which the permitting authority offers public participation and, in the case of a Class I draft operating permit, affected State review.

~~046~~ 047 “Electric utility steam generating unit” means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

~~047~~ 048 "Elevated terrain" means terrain, which may affect the calculation of good engineering practice stack height.

~~048~~ 049 "Emission data" means chemical analysis of process fuel and the manufacturing or production process, as well as operational procedures and actual nature and amounts of emissions.

~~049~~ 050 "Emission limitation" and "Emission standard" mean a requirement established pursuant to this Title, the State Act, or the Administrator 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.

~~050~~ 051 "Emissions allowable under the permit" means a federally enforceable permit term or condition determined at issuance to be required by an applicable

requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

~~051~~ 052 "Emissions unit" means any part or activity of a stationary source, which emits or would have the potential to emit any regulated air pollutant ("regulated NSR pollutant" for purposes of the Prevention of Significant Deterioration program) or any pollutant listed in Appendix II. This term includes electric steam generating units. This term is not meant to alter or affect the definition of the "unit" for purposes of Chapter 26.

For purposes of the Prevention of Significant Deterioration (PSD) program, there are two types of emissions units:

(a) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated; and

(b) An existing emissions unit is any emissions unit that does not meet the requirements in (a) above.

~~052~~ 053 "Emissions" means releases or discharges into the outdoor atmosphere of any air contaminant or combination thereof.

~~053~~ 054"Existing source" means equipment, machines, devices, articles, contrivances, or installations which are in being on the effective date of these regulations.

~~054~~ 055 "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

~~055~~ 056"Federally enforceable" means all limitations, conditions, and requirements within any applicable State Implementation Plan, any permit requirements established in any permit issued pursuant to this Title, and any requirements in Chapters 18 and 23, 27, or 28 which are enforceable by the Administrator.

~~056~~ 057 "Final permit" means the version of a permit issued by the Department that has completed all review procedures required by Chapter 14, and for a Class I permit, Chapter 13.

~~057~~ 058"Fixed capital cost" means the capital needed to provide all the depreciable components of a source.

~~058~~ 059 "Fuel burning equipment" means any furnace, boiler, apparatus, stack and all associated equipment, used in the process of burning fuel.

~~059~~ 060 "Fugitive dust" means solid airborne particulate matter emitted from any source other than a flue or stack.

~~060~~ 061 "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

~~061~~ 062 "General permit" means a Class I or Class II operating permit that meets the requirements of Chapter 9.

~~062~~ 063 "Hazardous air pollutant" means any air pollutant:

~~062.01~~ 063.01 listed in Appendix II, or

~~062.02~~ 063.02 to which no ambient air quality standard is applicable and which in the judgment of the Director may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.

~~063~~ 064 “High terrain” means any area having an elevation 900 feet or more above the base of the stack of a source.

~~064~~ 065 "Incinerator" means any furnace used in the process of burning solid waste, except for a furnace owned and operated by law enforcement agencies solely to dispose of ammunition, fireworks or similar flammable or explosive materials.

~~065~~ 066 “Indian Governing Body” means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

~~066~~ 067 “Indian Reservation” means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

~~067~~ 068 “Innovative control technology” means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.

~~068~~ 069 “Insignificant activities” refers to activities and emissions that may be excluded from reporting for operating permit applications and/or emissions inventories. Emissions exempted from reporting requirements must still be included in the determination of whether a source must obtain a Class I or Class II operating permit.

~~069~~ 070 "Installation" means an identifiable piece of process equipment.(This definition does not apply to the Prevention of Significant Deterioration program. See “building, structure, facility, or installation”)

~~070~~ 071 "Interstate air pollution control agency" means:

> ~~070.01~~ 071.01 An air pollution control agency established by two or more states; or
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> ~~070.02~~ 071.02 An air pollution control agency of two or more political subdivisions located in different states.

~~071~~ 072 “Local agency" means any air pollution control agency in this state, other than a state agency, which is charged with responsibility for carrying out part of a plan.

~~072~~ 073"Low emitter" refers to a facility that has a potential to emit any regulated pollutant above the major source threshold (Class I operating permit level), but has actual emissions below the levels requiring a Class II operating permit.

~~073~~ 074 "Low terrain" means any area other than high terrain.

~~074~~ 075 "Lowest Achievable Emission Rate (LAER)" means, for any source, the more stringent emission rate from either:

> ~~074.01~~ 075.01 The most stringent emission limitation contained in the implementation plan of any state for such class or category of sources (as adopted by the Council) unless the owner or operator of the proposed source demonstrates that such limitations are not achievable; or
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> ~~074.02~~ 075.02 The most stringent emission limitation which is achieved in practice by such class or category of source and adopted by the Council. These limitations, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of
> the amount allowable under an applicable new source standard of performance.

~~075~~ 076"Major emissions unit" means:

> ~~075.01~~ 076.01Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or
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> ~~075.02~~ 076.02 Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Act for nonattainment areas.

~~076~~ 077"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.

~~076.01~~ 077.01 Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone.

~~076.02~~ 077.02 A physical change or change in the method of operation shall not include:

~~076.02A~~ 077.02A Routine maintenance, repair and replacement;

~~076.02B~~ 077.02B Use of an alternative fuel or raw material by reason of any order under sections 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 pursuant to the Federal Power Act;

~~076.02C~~ 077.02C Use of an alternative fuel by reason of an order or rule under section 125 of the Act;

~~076.02D~~ 077.02D Use of an alternative fuel at a steam-generating unit to the extent that the fuel is generated from municipal solid waste;

~~076.02E~~ 077.02E Use of an alternative fuel or raw material by a stationary source which:

~~076.02E1~~ 077.02E1 The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition, which was established after December 21, 1976, pursuant to the Prevention of Significant Deterioration Program as defined in Chapter 1; or

~~076.02E2~~ 077.02E2 The source is approved to use under any permit issued under regulations approved pursuant to the Prevention of Significant Deterioration Program as defined in Chapter 1;

~~076.02F~~ 077.02F An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition, which was established after December 21, 1976, pursuant to the Prevention of Significant Deterioration Program as defined in Chapter 1; or

~~076.02G~~ 077.02G Any change in ownership at a stationary source.

~~076.02H~~ 077.02H The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

~~076.02H1~~ 077.02H1 The State implementation plan for the State in which the project is located; and

~~076.02H2~~ 077.02H2 Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

~~076.02I~~ 077.02I 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.

~~076.02J~~ 077.02J The reactivation of a very clean coal-fired electric utility team generating unit.

~~076.03~~ 077.03 This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with

the requirements under Chapter 19 for a PAL for that pollutant. Instead, the definition of "PAL major modification" shall apply.

~~077~~ 078 "Major source baseline date" means, in the case of particulate matter and sulfur dioxide, January 6, 1975, and, in the case of nitrogen dioxide, February 8, 1988.

~~078~~ 079 "Major stationary source" or "major source" means any source identified in Chapter 2.

~~079~~ 080 "Maximum achievable control technology" or (MACT)" means:

~~079.01~~ 080.01 For new sources, the emission limitation reflecting the maximum degree of reduction in hazardous air pollutant emissions that is deemed achievable, which is no less stringent than the emission limitation achieved in practice by the best controlled similar source.

~~079.02~~ 080.02 For existing sources, the emission limitation reflecting the maximum degree of reduction in hazardous air pollutant emissions that the Director, taking into consideration the cost of achieving such emission reductions, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory, which is no less stringent than the average emission limitation achieved by the best performing 12 percent of the existing sources, as determined pursuant to section 112(d)(3) of the Act.

~~080~~ 081 "Method 9" refers to a visual determination of the opacity of emissions from a stationary source as defined in 40 CFR 60, Appendix A-4.

~~081~~ 082 "Method 22" refers to a visual determination of fugitive emissions from material sources and smoke emissions from flares as defined in 40 CFR 60, Appendix A-7.

~~082~~ 083"Minor source" means any source which is not defined as a major source in Chapter 2.

~~083~~ 084 “Minor source baseline date” means the earliest date after the trigger date on which a major stationary source or a major modification subject to the Prevention of Significant Deterioration Program as defined in Chapter 1 submits a complete permit application. The trigger date is, in the case of particulate matter and sulfur dioxide, August 7, 1977, and, in the case of nitrogen dioxide, February 8, 1988. Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM_{10} increments, except that the Department may rescind any such minor source baseline date where it can be shown, the satisfaction of the Department, that the emissions increase from the major stationary source, or the net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM_{10} emissions.

The baseline date is established for each pollutant for which increments or other equivalent measures have been established if the area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(i)(D) or (E) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 or to Chapter 19; and, in the case of a major stationary source, the pollutant would be emitted in significant amounts, or in the case of a major modification, there would be a significant net emissions increase of the pollutant.

~~084~~ 085 “Mobile source” means a motor vehicle, nonroad engine, or nonroad vehicle. A motor vehicle is a self-propelled vehicle designed for transporting persons or property on a street or highway. A nonroad vehicle is a vehicle powered by a nonroad engine. A nonroad engine is an internal combustion engine that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 111 or section 202 of the Act..

~~085~~ 086 "Modification" means any physical change in, or change in method of operation of, an affected facility which increases the amount of any air pollutant, except that:

> ~~085.01~~ 086.01 Routine maintenance, repair, and replacement (except as defined as reconstruction) shall not be considered physical changes; and

~~085.02~~ 086.02 An increase in the production rate or hours of operation shall not be considered a change in the method of operation, unless such change would violate a permit condition.

~~086~~ 087 "National standard" means either a primary or a secondary standard established pursuant to the Act.

~~087~~ 088 "Necessary preconstruction approvals or permits" means those permits or approvals required under federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

~~088~~ 089 "Net emissions increase" means the following:~~,~~

~~088.01~~ 089.01 With respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

~~088.01A~~ 089.01A The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to the Prevention of Significant Deterioration Program as defined in Chapter 1; and

088.01B Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases shall be determined as provided in Chapter 19, section 005 except that sections 005.05 and 005.06 shall not apply.

088.01C An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date five years before the source begins actual construction of the project and the date that the increase from the project occurs.

088.02 An increase or decrease in actual emissions is creditable only if:

088.02A It occurs within the contemporaneous period as defined in section 088.01C; and

088.02B The Director has not relied on it in issuing a permit for the source under regulations approved pursuant to 40 CFR 51.165, which permit is in effect when the increase in actual emissions from the particular change occurs; and

088.03 An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

088.04 An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

088.05 A decrease in actual emissions is creditable only to the extent that:

088.05A The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

088.05B It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;

088.05C The Director has not relied on it in issuing any permit under regulations in the State Implementation Plan approved pursuant to 40 CFR Part 51, Subpart I or in demonstrating attainment or reasonable further progress; and

088.05D It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

088.06 An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement ~~t~~ unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

088.07 Section 002.01 shall not apply for determining creditable increases and decreases.

089 "New source" means any stationary source the construction, modification, or reconstruction of which is commenced after the publication of regulations by the State of Nebraska or the federal government prescribing a standard of performance which will be applicable to such source.

090 "Non-attainment area" means any area designated by the Department or the United States Environmental Protection Agency pursuant to Section 107 (d) of the Act as an area exceeding any National Ambient Air Quality Standard.

091 "Opacity" means a state which renders material partially or wholly impervious to rays of light and causes obstruction of an observer's view.

092 "Open fires" means the burning of any matter in such a manner that the products of combustion resulting from such fires are emitted directly into the ambient air without passing through an adequate stack, duct, or chimney.

093 "Owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

094 “PAL effective date” generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased Plantwide Applicability Limitation (PAL) is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

095 “PAL effective period” means the period beginning with the PAL effective date and ending 10 years later.

096 “PAL major modification” means, notwithstanding the definitions of “major stationary source” and “major modification”, any physical change in or change in the method of operation of the Plantwide Applicability Limitation (PAL) source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

097 “PAL permit” means the construction permit issued by the Department that establishes a Plantwide Applicability Limitation (PAL) for a major stationary source.

098 “PAL pollutant” means the pollutant for which a Plantwide Applicability Limitation (PAL) is established at a major stationary source.

099 "Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

100 "Particulate matter emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method, specified by the United States Environmental Protection Agency, or by a test method specified in an approved State Implementation Plan.

101 "Performance test" means measurements of emissions or other procedures used for the purpose of determining compliance with a standard of performance conducted in accordance with approved test procedures.

102 "Permit program costs" means all reasonable (direct and indirect) costs required to develop and administer an air operating permit program, as set forth in Neb. Rev. Stat. §81-1505.04.

103 "Permit revision" means a revision to an operating or construction permit that meets the requirements of Chapter 15.

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104 "Permitting authority" means the Department of Environmental Quality.

105 "Person" means any individual partnership; limited liability company; association; public or private corporation; trustee; receiver; assignee; agent; municipality or other governmental subdivision; public agency; other legal entity; or any officer or governing or managing body of any public or private corporation, municipality, governmental subdivision, public agency, or other legal entity.

106 "Plan" means an implementation plan adopted by the State pursuant to Section 110 of the Act, to attain and maintain a national standard.

107 "Plantwide applicability limitation (PAL)" means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with Chapter 19, section 011.

108 "PM_{10}" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on Appendix J at 40 CFR Part 50 or equivalent methods.

109 "PM_{10} emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method, specified by the United States Environmental Protection Agency or by a test method specified in an approved State Implementation Plan.

110 Reserved.

111 "Pollution prevention" means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.

112 "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 or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source. 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 Chapter 26.

113 "Predictive emissions monitoring system (PEMS)" means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O_2 or CO_2 concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

114 "Prevention of Significant Deterioration Program (PSD) program" means a major source preconstruction permit program that has been approved by the Administrator and incorporated into the plan to implement the requirements of 40 CFR 51.166 or 40 CFR 52.21. Any permit issued under such a program is a major NSR permit.

115 "Primary standard" means a national primary ambient air quality standard identified in Chapter 4.

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

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

118 "Process weight rate" means for continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or

for a typical portion thereof. For a cyclical or batch source operation, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the number of hours of actual process operation during such a period. Where the nature of any process or operation, or the design of any equipment, is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

119 “Project” means a physical change in, or change in method of operation of, an existing major stationary source.

120 “Projected actual emissions” has the definition given to it in Chapter 19, section 006.

121 "Proposed Class I operating permit" means the version of a permit that the Department proposes to issue and forwards to the Administrator for review.

122 "Reasonable further progress" means such annual incremental reductions in emissions of the relevant air pollutant as are required by the applicable implementation plan or may reasonably be required by the Director for the purpose of ensuring attainment of the applicable ambient air quality standard by the applicable date.

123 "Reconstruction" means a situation where the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new facility or source. However, any final decision as to whether reconstruction has occurred shall be made in accordance with the provisions of 40 CFR 60.15(f)(1)-(3). A reconstructed source will be treated as a new stationary source. In determining best available control technology or lowest achievable emission rate for a reconstructed source, the provisions of 40 CFR 60.15(f)(4) shall be taken into account in assessing whether a standard of performance under 40 CFR Part 60 is applicable to such source.

124 "Region" means:

124.01 An air quality control region designated by the Administrator; or

124.02 Any area designated by the State as an air quality control region.

125 "Regional administrator" means the Regional designee appointed by the Administrator.

126 "Regulated air pollutant" means the following:

126.01 Nitrogen oxides or any volatile organic compounds as defined in this Chapter;

126.02 Any pollutant for which a national ambient air quality standard has been promulgated;

126.03 Any pollutant that is subject to any standard in Chapter 18; and

126.04 Any pollutant subject to a standard or other requirements established in Chapters 27 or 28 relating to hazardous air pollutants, including the following:

126.04A Any pollutant subject to requirements under Chapter 27, 005; and

126.04B Any pollutant for which the requirements ~~of~~ relating to construction, reconstruction, and modification in Chapter 27, 003, have been met, but only with respect to the individual source subject to these requirements.

127 "Regulated NSR pollutant" means the following:

127.01 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 (e.g., volatile organic compound are precursors for ozone);

127.02 Any pollutant that is subject to any standard promulgated under section 111 of the Act;

127.03 Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or

127.04 Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112 (b)(3) of the Act, are not regulated NSR pollutants 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.

128 "Regulated pollutant for fee purposes" means any regulated air pollutant identified in the previous section, except for the following:

128.01 Carbon monoxide;

128.02 Particulate matter, excluding PM_{10};

128.03 Any pollutant that is a regulated air pollutant solely because it is a Class I or II substance subject to a standard promulgated under or established by Title VI of the Act and regulations adopted by the Council; or

128.04 Any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation promulgated under Section 112(r) of the Act and regulations adopted by the Council.

129 "Renewal" means the process by which a permit is reissued at the end of its term.

130 “Replacement unit” means an emissions unit for which all the criteria listed in this definition are met. No creditable emission reductions shall be generated from shutting down the existing unit that is replaced.

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130.01 The emissions unit is a reconstructed unit within the meaning of "reconstruction" as defined in Chapter 1, or the emissions unit completely takes the place of an existing emissions unit.

130.02 The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

130.03 The replacement does not change the basic design parameter(s) of the process unit.

130.04 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 unit is brought back into operation, it shall constitute a new emissions unit.

131 "Responsible official" means one of the following:

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

131.01A The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

131.01B The delegation of authority to such representatives is approved in advance by the permitting authority;

131.02 For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

131.03 For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA); or

131.04 For affected sources:

131.04A The designated representative in so far as actions, standards, requirements, or prohibitions under Chapter 26 are concerned; and

131.04B The designated representative for any other purposes under the Title V program.

132 "Rule or regulation" means any rule or regulation of the Council.

133 "Secondary emissions" means emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification, which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

134 "Secondary standard" means a national secondary ambient air quality standard identified in Chapter 4.

135 "Section 502(b)(10) changes" are changes provided for in section 502 (b)(10) of the Act. These are changes allowed within a permitted facility without requiring a permit revision if the changes are not modifications under any provision of Title I

of the Act and the changes do not exceed the emissions allowable under the permit .The facility must provide the Department with written notification in advance of the proposed changes at least 30 days in advance unless the Director determines a different timeframe due to an emergency.

136 "Significant" means, as pertains to a modification in a non-attainment area, a net increase in actual emissions by a rate that would equal or exceed the following rates ("Significant" for purposes of the Prevention of Significant Deterioration Program is defined in Chapter 19):

Pollutant and Emission Rate

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy

Particulate matter: 25 tpy

PM_{10}: 15 tpy

Ozone: 40 tpy of volatile organic compounds

Lead: 0.6 tpy

Fluorides: 3 tpy

Sulfuric acid mist: 7 tpy

Hydrogen sulfide (H_2S): 10 tpy

Total reduced sulfur (including H_2S): 10 tpy

Reduced sulfur compounds (including H_2S): 10 tpy

Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2×10^{-6} megagrams per year (3.5×10^{-6} tons per year)

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)

137 "Significant emissions increase" has the definition given to it in Chapter 19, section 008.

138 "Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in section 136 or in the Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in section 075.

139 "Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in section 135 or in the Act, whichever is lower.

140 "Solid waste" means any garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial and mining operations, and from community activities.

141 "Source" means any property, real or personal, or person contributing to air pollution.

142 “Speciation” is the process of classifying and separating objects by common characteristics including, but not limited to, chemical mass balance, factor analysis, optical microscopy, and automated scanning electron microscopy. It is the process used to find the relative proportions or mix of air source categories which best accounts for the composition of a pollutant sample.

143 "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

144 "Stack in existence" means that the owner or operator had (1) begun, or caused to begin, a continuous program of physical on-site construction of the stack or (2) entered into binding agreements or contractual obligations which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in a reasonable time.

145 "Stack height" means the distance from the ground level elevation of a stack to the elevation of the stack outlet.

146 "Standard of performance" means a standard for emission of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction) the Director determines has been adequately demonstrated.

147 "Startup of operation" means the beginning of routine operation of an affected facility.

148 "State" means any non-Federal permitting authority, including any local agency, interstate association, or statewide program.

149 "State Act" means the Nebraska Environmental Protection Act, Neb. Rev. Stat. §81-1501 through §81-1533, as amended.

150 "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under this Title.

151 “Synthetic minor” refers to a facility that has a potential to emit any regulated pollutant above the major source threshold (Class I operating permit level), but has taken federally enforceable limits to keep potential emissions below the major source threshold, but above the minor source threshold.

152 "Title V program" or "State program" means a program approved by the Administrator for purposes of Title V of the Act.

153 "Total reduced sulfur" means total sulfur from the following compounds: hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.

154 "Total Suspended Particulates" means particulate matter as measured by the method described in Appendix B of 40 CFR Part 50.

155 “UTM coordinates” refer to the Universal Transverse Mercator Coordinate (UTM) system, which provides coordinates on a world wide flat grid. The UTM coordinate system divides the world into 60 zones, each being six degrees longitude wide and extending from 80 degrees south latitude to 84 degrees north latitude. The first zone starts at the International Date Line and proceeds eastward.

156 "Volatile organic compound (VOC)" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. VOC includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity:

acetone;

1-chloro-1,1-difluoroethane (HCFC-142b);

Chlorodifluorom ethane (CFC-22);

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1-chloro-1-fluoroethane (HCFC-151a);

chlorofluoromethane (HCFC-31);

Chloropentafluoroethane (CFC-115);

2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);

1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethylpentane (HFE-7300)

1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee)

Dichlorodifluorom ethane (CFC-12);

1,1-dichloro-1-fluoroethane (HCFC-141b);

1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)

3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)

1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114);

1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);

1,1-difluoroethane (HFC-152a);

difluoromethane (HFC-32);

2-(difluorom ethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane [$(CF_3)_2CFCF_2OCH_3$];

dim ethyl carbonate

Ethane;

2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane [$(CF_3)_2CFCF_2OC_2H_5$];

1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$) or HFE-7200;

3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trefluoromethyl) hexane (known as HFE-7500, HFE-s702, T-7145, and L-15381);

ethylfluoride (HFC-161);

1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-$C_3F_7OCH_3$) (known as HFE-7000); ~~1,1,1,2,3,3,3-heptafluoropropane (known as HFC 227ea);~~

1,1,1,2,3,3,3-heptafluoropropane (known as HFC 227ea);

1,1,1,2,3,3-hexafluoropropane (HFC-236ea);

1,1,1,3,3,3-hexafluoropropane (HFC-236fa);

Methane;

Methyl acetate;

methyl formate ($HCOOCH_3$);

Methylene chloride (dichloromethane);

1,1,1,2,2,3,3,4,4-nonafluoro-4-m ethoxy-butane ($C_4F_9OCH_3$);

parachlorobenzotrifluoride (PCBTF);

1,1,1,3,3-pentafluorobutane (HFC-365mfc);

Pentafluoroethane (HCFC-125);

1,1,1,2,3-pentafluoropropane (HFC-245eb);

1,1,2,2,3-pentafluoropropane (HFC-245ca);

1,1,2,3,3-pentafluoropropane (HFC-245ea)
;

1,1,1,3,3-pentafluoropropane (HFC-245fa);

propylene carbonate

t-butyl acetate (known at tertiary butyl acetate or TBAC);

tetrachloroethylene (perchloroethylene or (PERC);

1,1,1,2-tetrafluoroethane (HFC-134a);

1,1,2,2-tetrafluoroethane (HFC-134);

1,1,1-trichloroethane (methyl chloroform);

Trichlorofluorom ethane (CFC-11);

1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);

1,1,1-trifluoro-2,2-dichloroethane (HCFC-123);

1,1,1-trifluoroethane (HFC-143a);

Trifluorom ethane (FC-23); HFC-23

volatile methyl siloxanes (VMS);

and perfluorocarbon compounds which fall into the following classes:

a. Cyclic, branched, or linear, completely fluorinated alkanes;

b. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

c. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

d. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

157 "Wood waste" means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings.

158 "Yard waste" means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs. They come from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands.

Legal Citation: Title 129, Ch. 1, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 129 - Department of Environmental Quality

Chapter 18 - NEW SOURCE PERFORMANCE STANDARDS AND EMISSION LIMITS FOR EXISTING SOURCES

001 Standards of Performance for New Stationary Sources. Notwithstanding any other provisions of these regulations, the following "Standards of Performance for New Stationary Sources" published at 40 CFR Part 60, effective July 1, 2006, unless otherwise indicated are hereby adopted by reference and incorporated herein:

001.01 General Provisions - Subpart A as revised at 72 Federal Register 32714 on June 13, 2007.

001.02 Ammonium sulfate manufacture - Subpart PP

001.03 Asphalt processing and asphalt roofing manufacture - Subpart UU

001.04 Automobile and light-duty truck surface coating operations - Subpart MM

001.05 Beverage can surface coating industry - Subpart WW

001.06 Bulk gasoline terminals - Subpart XX

001.07 Calciners and dryers in mineral industries - Subpart UUU

001.08 Coal preparation plants - Subpart Y

001.09 Electric arc furnaces and argon-oxygen decarbonization vessels constructed after August 17, 1983 - Subpart AAa

001.10 Electric arc furnaces constructed after October 21, 1974 and on or before August 17, 1983 - Subpart AA

001.11 Electric utility steam generator units for which construction was commenced after September 18, 1978 - Subpart Da, as revised at 72 Federal Register 32714 on June 13, 2007. Section 60.45Da "Standard for Mercury (Hg)" is not incorporated.

001.12 Equipment leaks of VOC from onshore natural gas processing plants - Subpart KKK

001.13 Equipment leaks of VOC in petroleum refineries for which construction, reconstruction, or modification commenced after January 4, 1983, and on or before November 7, 2006 - Subpart GGG

001.14 Equipment leaks of VOC in the synthetic organic chemicals manufacturing industry for which construction, reconstruction, or modification commenced after January 5, 1981, and on or before November 7, 2006 - Subpart VV

001.15 Ferroalloy production facilities - Subpart Z

001.16 Flexible vinyl and urethane coating and printing - Subpart FFF

001.17 Fossil-fuel-fired steam generators for which construction is commenced after August 17, 1971 - Subpart D, as revised at 72 Federal Register 32714 on June 13, 2007.

001.18 Glass manufacturing plants - Subpart CC

001.19 Grain elevators - Subpart DD

001.20 Graphic arts industry: publication rotogravure printing - Subpart QQ

001.21 Hot mix asphalt facilities (asphalt concrete plants) - Subpart I

001.22 Industrial-commercial-institutional steam generating units – Subpart Db, as revised at 72 Federal Register 32714 on June 13, 2007.

001.23 Industrial surface coating: large appliances - Subpart SS

001.24 Industrial surface coating: plastic parts for business machines - Subpart TTT

001.25 Lead-acid battery manufacturing plants - Subpart KK

001.26 Lime manufacturing plants - Subpart HH

001.27 Magnetic tape coating facilities - Subpart SSS

001.28 Metal coil surface coating - Subpart TT

001.29 Metallic mineral processing plants - Subpart LL

001.30 Municipal incinerators - Subpart E

001.31 Municipal waste combusters - Subpart Ea

001.32 Nitric acid plants - Subpart G

001.33 Nonmetallic mineral processing plants - Subpart OOO

001.34 Onshore natural gas processing; SO2 emissions - Subpart LLL

001.35 Petroleum dry cleaners - Subpart JJJ

001.36 Petroleum refineries for which construction, reconstruction, or modification commenced after June 11, 1973, and on or before May 14, 2007 - Subpart J

001.37 Phosphate fertilizer plants - Subparts T through X

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001.38 Phosphate rock plants - Subpart NN

001.39 Polymeric coating of supporting substrates facilities - Subpart VVV

001.40 Portland cement plants - Subpart F

001.41 Pressure sensitive tape and label surface coating operations - Subpart RR

001.42 Primary aluminum reduction plants - Subpart S

001.43 Primary copper smelters - Subpart P

001.44 Primary emissions from basic oxygen process furnaces for which construction is commenced after June 11, 1973 - Subpart N

001.45 Primary lead smelters - Subpart R

001.46 Primary zinc smelters - Subpart Q

001.47 Rubber tire manufacturing industry - Subpart BBB

001.48 Secondary brass and bronze production plants - Subpart M

001.49 Secondary emissions from basic oxygen process steelmaking facilities for which construction commenced after January 20, 1983 - Subpart Na

001.50 Secondary lead smelters - Subpart L

001.51 Sewage treatment plants - Subpart O

001.52 Small industrial-commercial-institutional steam generation units- Subpart Dc, as revised at 72 Federal Register 32714 on June 13, 2007.

001.53 Stationary gas turbines - Subpart GG..

001.54 Storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after June 11, 1973, and prior to May 19, 1978 - Subpart K

001.55 Storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after May 18, 1978, and prior to July 23, 1984 - Subpart Ka

001.56 Sulfuric acid plants - Subpart H

001.57 Surface coating of metal furniture - Subpart EE

001.58 Synthetic fiber production facilities - Subpart HHH

001.59 Volatile organic compounds (VOC) emissions from petroleum refinery wastewater systems - Subpart QQQ

001.60 Volatile organic compounds (VOC) emissions from the synthetic organic chemical manufacturing industry (SOCMI) air oxidation unit process - Subpart III

001.61 Volatile organic compounds (VOC) emissions from the synthetic organic chemical manufacturing industry (SOCMI) distillation operations - Subpart NNN

001.62 Volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984 - Subpart Kb .

001.63 Wool fiberglass insulation manufacturing plants constructed after February 7, 1984 - Subpart PPP

001.64 Appendices A, B, C, and F

001.65 Municipal solid waste landfills - Subpart WWW

001.66 Municipal waste combustors -- Subpart Eb

001.67 Hospital/medical/infectious waste incinerators -- Subpart Ec

001.68 Small municipal waste combustion units – Subpart AAAA

001.69 Commercial and industrial solid waste incineration units for which construction commenced after November 30, 1999 or for which modification or reconstruction commenced on or after June 1, 2001 – Subpart CCCC, as issued at 65 Federal Register 75,350 on December 1, 2000.

001.70 Volatile organic compounds (VOC) emissions from the synthetic organic chemical manufacturing industry (SOCMI) reactor processes – Subpart RRR

001.71 New residential wood heaters – Subpart AAA

001.72 Volatile organic compound (VOC) emissions from the polymer manufacturing industry – Subpart DDD

001.73 Commercial and industrial solid waste incineration units for which construction commenced on or before November 30, 1999 – Subpart DDDD, as issued at 65 Federal Register 75,350 on December 1, 2000.

001.74 Standards of Performance for Other Solid Waste Incineration Units for which Construction is Commenced After December 9, 2004, or for which Modification or Reconstruction is Commenced on or After June 16, 2006 – Subpart EEEE.

001.75 Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction On or Before December 9, 2004 – Subpart FFFF.

 December 2009 EQC proposed changes on pages 18-2, 18-3, 19-7 through 18-9.

001.76 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines – Subpart IIII, as published at 71 Federal Register 39172 on July 11, 2006.

001.77 Standards of Performance for Stationary Combustion Turbines – Subpart KKKK, as published at 71 Federal Register 38494 on July 6, 2006.

001.78 Equipment leaks of VOC in petroleum refineries for which construction, reconstruction, or modification commenced after November 6, 2006 - Subpart GGGa

001.79 Equipment leaks of VOC in synthetic organic chemicals manufacturing industry for which construction, reconstruction, or modification commenced after November 6, 2006 - Subpart VVa

001.80 Petroleum refineries for which construction, reconstruction, or modification commenced after May 14, 2007 - Subpart Ja

001.81 Kraft pulp mills - Subpart BB

001.82 Stationary Spark Internal Combustion Engines - Subpart JJJJ

002 Except as provided in 004 below, standards of performance are applicable only to those new, modified, or reconstructed facilities specified or defined as an "affected facility".

003 Should the source need assistance in determining the CFR requirements the Department will provide the needed information on request.

004 Emission Limits for Existing Stationary Sources. Notwithstanding any other provisions of these regulations, the following emission limits are applicable to existing sources as follows:

004.01 Municipal solid waste (MSW) landfills. The designated facility to which these limits apply is each existing MSW landfill for which construction, reconstruction or modification was commenced before May

30, 1991, which has accepted waste at any time since November 8, 1987, or has additional capacity available for future waste deposition.

004.01A Each designated facility shall submit an initial design capacity report 90 days after September 8, 1997 on forms provided by the Department. The final determination of design capacity shall be subject to review and approval by the Department. Any change in the physical boundaries, operation or waste deposition practices which increase or decrease the design capacity of the landfill shall require the submittal of an amended design capacity report.

004.01B Each designated facility having an aggregate design capacity of 2.5 million megagrams or 2.5 million cubic meters or more shall calculate and report nonmethane organic compound (NMOC) emissions as provided for new MSW landfills under section 001.65 of this chapter beginning 90 days after September 8,1997.

004.01C Each designated facility having an NMOC emission rate of 50 megagrams per year or more shall design, install and operate a landfill gas collection and control system (LGCCS) as provided for new MSW landfills under section 001.65 of this chapter. An alternate design plan may be approved by the Department provided the source demonstrates that

004.01C1 Meeting the requirements of section 001.65 of this chapter will result in unreasonable costs of control due to plant age, location, or basic process design;

004.01C2 It will be physically impossible to install the necessary control equipment needed to meet the requirements of section 001.65 of this chapter; or

004.01C3 Other factors specific to the facility will make application of a less stringent standard significantly more

reasonable than meeting the requirements of section 001.65 of this chapter.

004.01D Each designated facility subject to the control provisions of 004.01C above shall submit the LGCCS design for Department review within 1 year of the first report in which NMOC emissions equal or exceed 50 megagrams per year, and shall install the approved LGCCS within 30 months of that report, except as provided under section 001.65 of this chapter.

004.01E Each designated facility subject to the control provisions of 004.01C above shall conduct testing, monitoring, recordkeeping and reporting for the LGCCS as provided for new MSW landfills under section 001.65 of this chapter.

004.01E1 If a source receives approval for an alternate design plan under section 004.01C, the Department may also approve alternate testing and monitoring procedures for the source, provided the source demonstrates that the testing and monitoring requirements in section 001.65 are not practical for the alternate design and that the alternate procedures are adequate to determine compliance with the approved alternate design plan.

004.02 Hospital/medical/infectious waste incinerators. The designated facility to which these limits apply is each individual hospital/medical/ infectious waste incinerator for which construction, reconstruction or modification was commenced on or before June 20, 1996. The emission limits under this section apply at all times except during startup, shutdown or malfunction, provided that no hospital waste or medical/infectious waste is charged to the designated facility during startup, shutdown or malfunction. For purposes of this section, the definitions in 40 CFR Part 60, §60.31 and the exceptions and exemptions from the definition of designated facility in 40 CFR Part 60, §§60.32e(b) through (h), are adopted by reference and incorporated herein.

004.02A Beginning September 15, 2000, each designated facility

subject to this section shall be operated pursuant to a Class I operating permit.

004.02B For purposes of this section, the size classifications and emission limits provided in Tables 1 and 2 of 40 CFR Part 60, Subpart Ce are adopted by reference and incorporated herein. On or after the date on which the initial compliance test is required, no designated facility shall cause to be discharged into the atmosphere any gases that contain stack emissions in excess of the limits for its size, as provided in either Table 1 or 2, as applicable, or exhibit greater than 10 percent opacity, as evaluated by Method 9 in Appendix A of 40 CFR Part 60.

004.02C Each designated facility subject to the provisions of this section shall comply with the requirements for operator training and qualification, waste management plans, and recordkeeping and reporting, except for requirements relating to siting and fugitive emissions, as provided for new sources in section 001.67 of this chapter.

004.02D Each designated facility subject to the provisions of Table 1 as adopted in 004.02B shall comply with the requirements for compliance and performance testing and monitoring, except for fugitive emissions testing, as provided for new sources in 001.67 of this chapter.

004.02E Each designated facility subject to the provisions of Table 2 as adopted in 004.02B shall undergo an initial equipment inspection within 1 year of December 15, 1998, and subsequent equipment inspections no more than 12 months following each previous equipment inspection. For purposes of this paragraph, the inspection requirements in 40 CFR Part 60 §§60.36e(a)(1) and (2) are adopted by reference.

 December 2009 EQC proposed changes on pages 18-2, 18-3, 19-7 through 18-9.

004.02F Each designated facility subject to the provisions of Table 2 as adopted in 004.02B shall comply with the following:

004.02F1 Requirements for compliance and performance testing as provided in 40 CFR Part 60, §§60.37e(b)(1) through (5);

004.02F2 Requirements for monitoring as provided in 40 CFR Part 60, §§60.37e(d)(1) through (3); and

004.02F3 Requirements for reporting and recordkeeping as provided in 40 CFR Part 60,§§60.38e(b)(1) and (2).

004.02G Each designated facility subject to the provisions of this section shall comply with all provisions of this section no later than 1 year after the EPA approval of the state plan for existing hospital/medical/infectious waste incinerators.

Enabling Legislation: Neb. Rev. Stat. §§ 81-1504(1)(2); 81-1505(12)

Legal Citation: Title 129, Ch. 18, Nebraska Department of Environmental Quality

Title 129 – NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 22 - INCINERATORS; EMISSION STANDARDS

001 The provisions of this chapter shall apply to all new and existing incinerators except for those listed in sections 001.01 through 001.05. Incinerators not included in the exceptions listed in sections 001.01 through 001.05 must comply with construction permit requirements listed in Chapter 17, section 001.03.

001.01 ~~i~~Incinerators located on residential premises containing five or less dwelling units and used exclusively for the disposal of waste originating on said premises~~,~~;

001.02 ~~i~~Incinerators used solely for space heating~~,~~; ~~and those~~

001.03 Incinerators used to burn hazardous waste and subject to regulations under Nebraska Administrative Code Title 128, Chapter 7, section 008.

001.04 Furnaces used for law enforcement purposes specified in definition of "incinerator" in Chapter 1.

001.05 Air curtain incinerators subject to Chapter 18 sections 001.68 or 001.69 or which operate in compliance with Chatper 30, section 002.07G and combust only 100 percent wood waste; 100 percent clean lumber; 100 percent yard waste; or a 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

001.05 A Air curtain incinerators must meet additional requirements in section 007.

002 No person shall cause or permit emissions of particulate matter from any incinerator to be discharged into the outdoor atmosphere to exceed 0.10 grains per dry standard cubic foot (gr./dscf) of exhaust gas, corrected to 7% oxygen.

003 The burning capacity of an incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the Director in accordance with good engineering practice.

004 Waste burned during performance testing required by Chapter 34 shall be representative of the waste normally generated by the affected facility and shall be charged at a rate equal to the burning capacity of the incinerator. Copies of any additional operational data recorded during the test shall be submitted to the Department together with the completed test report forms.

005 Instructions for proper operation of each incinerator shall be posted on site and written certification that each operator has read these instructions, understands them and intends to

comply, shall be kept on record by the owner.

006 Except as provided in 006.01 and 006.02 below, each incinerator shall consist of (a) refractory lined combustion furnace(s) employing adequate design parameters necessary for maximum combustion of the materials to be burned, and shall be designed to vent the products of combustion through an adequate stack, duct, or chimney.

006.01 An alternate design for a new unit may be permitted provided it can be shown that the alternative design is at least as effective in controlling pollutant emissions as the design criteria of this section.

006.02 An operating permit can be issued to an existing unit not meeting the design criteria set forth in 006 above, provided compliance with both 002 of this chapter and the visible emission standard in 005 of Chapter 20 can be demonstrated.

007 Air curtain incinerators which combust only clean lumber, wood waste, and/or yard waste shall meet the following requirements:

007.01 Within 60 days after the air curtain incinerator reaches the charge rate at which it will operate, but no later than 180 days after its initial startup, the limitations in sections 007.01A and 007.01B must be met:

007.01A The opacity limitation is 10 percent (6-minute average), except as described in section 007.01B.

007.01B The opacity limitation is 35 percent (6-minute average) during the startup period that is within the first 30 minutes of operation.

007.02 Except during malfunctions, the requirements of section 007.01 apply at all times, and each malfunction must not exceed 3 hours.

007.03 Opacity monitoring of the air curtain incinerator shall include:

007.03A Use of Method 9 of appendix A of New Source Performance Standards (40 CFR 60) to determine compliance with the opacity limitation.

007.03B Conducting an initial test for opacity as specified in 40 CFR 60.8.

007.03C After the initial test for opacity, conducting annual tests no more than 12 calendar months following the date of previous test.

007.04 Prior to commencing construction on the air curtain incinerator, submit the three items described in sections 007.04A through 007.04C:

007.04A Notification of intent to construct the air curtain incinerator.
007.04B Planned initial startup date.

007.04C Types of materials to be burned in the air curtain incinerator.

007.05 Recordkeeping requirements for air curtain incinerators:

007.05A Keep records of results of all initial and annual opacity tests onsite (or readily available) in either a paper copy or electronic format, unless the Director approves another format, for at least five years.

007.05B Make all records available for submittal to the Director or for an inspector's onsite review.

007.05C The results (each 6-minute average) of the initial opacity tests must be submitted no later than 60 days following the initial test. Submit annual opacity test results within 12 months following the previous report.

007.05D Submit initial and annual opacity test reports as electronic or paper copy on or before the applicable submittal date.

007.05E Keep a copy of the initial and annual reports onsite (or readily available) for a period of five years.

Enabling Legislation: Neb. Rev. Stat. §§81-1504(1)(2); 81-1505(1)(2)

Legal Citation: Title 129, Ch. 22, Nebraska Department of Environmental Quality.

Title 129 - Department of Environmental Quality

Chapter 30 - OPEN FIRES

001 No person shall cause or allow any open fires.

002 Exceptions:

002.01 Fires set solely as part of a religious activity, for recreational purposes or for outdoor cooking of food for human consumption on non-commercial premises, provided no nuisance or hazard is created.

002.02 Fires set for the purpose of training public and industrial fire fighting personnel.

002.03 Fires set in the operation of smokeless flare stacks for the combustion of waste gases, provided they meet the requirements of Chapter 20, Particulate Emissions; Limitations and Standards.

002.04 Fires set in an agricultural operation where no nuisance or traffic hazard is created. For the purpose of this regulation, "fires set in an agricultural operation" shall mean:

002.04A The burning of any trees or vegetation indigenous to the property of the owner or person in lawful possession of the land; and

002.04B The burning of any agriculturally related material that is potentially hazardous and where disposal by burning is recommended by the manufacturer. Such materials must have been used on the owner's property or person in legal possession of the said property.

002.05 Unless prohibited by local ordinances, fires set to destroy household refuse on residential premises containing ten or less dwelling units, by individuals residing on the premises providing no nuisance or traffic hazard is created.

002.06 For the purpose of plant and wildlife and parks management, provided such burning is conducted by the Nebraska Game Commission, the United States Forest Service, the University of Nebraska, or other groups as determined by the Department.

002.07 Unless prohibited by local ordinances or regulations, fires set in compliance with a general open fire permit or a community open fire permit issued by the Department:

002.07A For the purpose of the destruction of dangerous materials, diseased vegetation or abatement of a fire hazard.

002.07B For the purpose of destruction of trees, brush and other vegetation removed from road and utility right-of-ways.

002.07C For the purpose of the destruction of trees, brush, vegetation and untreated lumber generated as a result of land clearing, and construction activities.

002.07D For the purpose of the destruction of straw used as a winter insulating cover on agricultural products.

002.07E For the purpose of destroying untreated wood and trees at community land disposal sites. (Materials being burned must be in an area separate from materials not being burned).

002.07F For the purpose of destruction of materials after cleanup from a natural disaster.

002.07G In compliance with rules for air curtain incinerators in Chapter 22, sections 001 and 007.

002.08 Permits for open fires as specified in this regulation will be granted only if there is no other practical means of disposal. Any burning of materials not specified in the burning permit may result in withdrawal of the permit.

Enabling Legislation: Neb. Rev. Stat. §§81-1504(1)(2); 81-1505(12)

Legal Citation: Title 129, Ch. 30, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 129 - Department of Environmental Quality

Chapter 34 - EMISSION SOURCES; TESTING; MONITORING

001 When Testing May Be Required

001.01 The Department may order any person responsible for the operation of an emission source to ~~make~~ test or have tests ~~made~~ conducted to determine the rate of contaminant emissions from the source whenever it has reason to believe, on the basis of estimates of potential contaminant emissions rates from the source and due consideration of probable efficiency of any existing control device, or visible emission determinations made by an official observer, that existing emissions exceed the limitations required in these control regulations.

001.02 Such tests may also be required pursuant to verifying that any newly installed control device meets performance specifications.

001.03 Should the Department determine that the test did not represent normal operating conditions or emissions, additional tests may be required.

002 Required Test Methods and Procedures. Required tests shall be conducted in accordance with the following test methods and procedures, as applicable:

002.01 40 CFR Part 51, Appendix M, effective July 1, 2002

002.02 40 CFR Part 60, Appendices A,B,C,F, effective July 12, 2002

002.03 40 CFR Part 61, Appendix B, effective July 1, 2002

002.04 40 CFR Part 63, Appendix A, effective July 1, 2002

002.05 40 CFR Part 266, Appendix IX, effective July 1, 2002

002.06 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846 (3rd Edition) (November 1986) and its Revisions I , II and III, effective June 13, 1997.

~~002.07 Such tests shall be conducted by reputable, qualified individuals. A certified written copy of the test results signed by the person conducting the test shall be provided to the Department within 45 days of completion of the test.~~

003 Required Conditions for Testing

003.01 The owner or operator of a source shall provide the Department 30 days notice prior to testing to afford the Department an opportunity to have an observer present.

003.01A The notice shall provide the specific date(s) testing will be conducted per emission point and test method(s) used. Unless the emission unit or testing equipment malfunctions, changes to the testing date will require a new 30 day notice unless approved by the Director.

003.01B Unless emission unit or tester equipment malfunction occurs, at least 50% of testing will be conducted during normal business hours (8:00 a.m.-5:00 p.m. in source's time zone) unless otherwise specified in the testing protocol.

003.01C Failure to provide a test notification and protocol at least 30 days prior to the testing may result in the rejection of the test report.

003.02 Required tests must be conducted by reputable, qualified individuals.

003.03 With the exception of Relative Accuracy Test Audit (RATA), all performance and compliance tests will consist of three one-hour runs unless a longer period is specified.

003.04 Performance tests shall be conducted while emissions units and control devices will be operated, under representative conditions, in accordance with 40 CFR 60.8.

003.05 Except during emission unit or test equipment malfunction, cessation of any test will be considered a failed test unless otherwise allowed by rule.

003.06 A certified written copy of the test results signed by the person conducting the test shall be provided to the Department within 45 days of completion of the test and shall include emission unit and control equipment operational parameters.

004 The Department may conduct tests of emissions of contaminants from any stationary source.

004.01 Upon written request from the Department, the person responsible for the source to be tested shall cooperate with the Department in providing all necessary test ports in stacks or ducts and such other safe and proper facilities, exclusive of instruments and sensing devices, as may be reasonably required to conduct the test with due regard being given to expenditures and possible disruption of normal operations of the source.

004.02 A report concerning the findings of such tests shall be furnished to the person responsible for the source upon request.

005 A continuous monitoring system for the measurement of opacity shall be installed and placed in operation by the owner or operator of any fossil fuel-fired steam generator with greater than 250 million BTUs per hour heat input. Exemptions from this requirement will be made if gaseous fuel and oil is the only fuel burned and the source has never been out of compliance with Chapter 20 of these regulations. Installation, calibration, operation and reporting shall be in accordance with the procedures specified in 40 CFR Part 60.

006 The Director may require the owner or operator of any other emission source which is subject to the provisions of these regulations to install, use and maintain such monitoring equipment as is required to demonstrate continuing compliance with any applicable emissions limitations, and to maintain records and make reports regarding such measured emissions to the Department in a manner and on a schedule to be determined by the Director.

007 When a new or modified stationary source becomes operational, the owner or operator will conduct performance tests, if required, within 60 days after reaching maximum capacity but not later than 180 days after the start-up of operations. Failure to meet established performance standards will result in withdrawal of the provisional approval granted to operate the new or modified stationary source. Final approval and issuance of an operating permit will be withheld for operation of the affected facility until such time as the owner or operator has corrected the deficiencies determined by the performance tests. Upon satisfactory accomplishment of a valid series of performance tests, approval for operation of the new or modified stationary source will be granted through issuance of an operating permit in accordance with Chapter 5.

008 Notwithstanding any other provisions of this Title, the following methods may be used to determine compliance with applicable requirements:

008.01 A monitoring method approved for the source and incorporated in an operating permit pursuant to Chapter 8;

008.02 Any compliance test method specified in the State Implementation Plan;

008.03 Any test or monitoring method approved for the source in a permit issued pursuant to Chapters 17, 19, or 27;

008.04 Any test or monitoring method provided for in this Title; or

008.05 Any other test, monitoring, or information-gathering method that produces information comparable to that produced by any method described in 008.01 through 008.04.

009 Predictive Emissions Monitoring System (PEMS) requirements. Where allowed by the Department, the owner or operator of any PEMS used to meet a pollutant monitoring requirement must comply with the following:

009.01 The PEMS must predict the pollutant emissions in the units of the applicable emission limitations.

009.02 Monitor diluent, either O_2 or CO_2 when applicable:

009.02A Using a CEMS:

009.02A1 In accordance with 40 CFR Part 60 Appendix B, Performance Specification 3 for diluent; or

009.02A2 With a similar alternative method approved by the Director and EPA; or

009.02B Using a PEMS with a method approved by the Director and EPA.

009.03 Any PEMS shall meet the requirements of 40 CFR Part 75, Subpart E except as provided in section 009.05.

009.04 The owner or operator of any PEMS installed subsequent to adoption of Chapter 34, section 009 shall perform the following initial certification procedures:

009.04A Conduct initial Relative Accuracy Test Audit (RATA) at low, medium, and high operating levels using 40 CFR Part 60, Appendix B:

009.04A1 Performance Specification 2, subsection 8.4 (pertaining to NOx) in terms of the applicable standard (in ppmv, lb/MMBtu, or g/hp-hr). except the relative accuracy shall be 10%, or within 2 ppm absolute difference;

009.04A2 Performance Specification 3, subsections 8 and 13.2 (pertaining to O_2 or CO_2); and

009.04A3 Performance Specification 4, subsections 8 and 13.2 (pertaining to CO), for owners or operators electing to use a CO PEMS; and

009.04B Conduct a t-test, an F-test, and a correlation analysis using 40 CFR Part 75, Appendix A, section 7.6 and section 75.41(c)(1) and (2) at low, medium, and high load levels.

009.04B1 Calculations shall be based on a minimum of 27 successive emission data points at each tested level which are at least seven-minute averages;

009.04B2 The t-test and the correlation analysis shall be performed using all data collected at the three tested levels;

009.04B3 The correlation analysis may be waived following review of the waiver request submittal if:

009.04B3(a) The process design is such that it is technically impossible to vary the process to result in a concentration change sufficient to allow a successful correlation analysis statistical test. Any waiver request must also be accompanied with documentation of the reference method measured concentration. The waiver is to be based on the measured value at the time of the waiver. Should a subsequent RATA effort identify a change in the reference method measured value by more than 30%, the statistical test must be repeated at the next

RATA effort to verify the successful compliance with the correlation analysis statistical test requirement; or

009.04B3(b) The data for a measured compound (e.g., NOx, O_2) are determined to be autocorrelated according to the procedures of 40 CFR §75.41(b)(2). A complete analysis of autocorrelation with support information shall be submitted with the request for waiver. The statistical test shall be repeated at the next RATA effort to verify the successful compliance with the correlation analysis statistical test requirement.

009.04B4 Allowable Test Adjustments

009.04B4(a) For either NOx or CO and for the purpose of conducting an f-test, if the standard deviation of the EPA reference method is less than either 3% of the span or five parts per million (ppm), use an EPA reference method standard deviation of either five ppm or 3% of span.

009.04B4(b) For the diluent CO_2 or O_2, and for the purpose of conducting an f-test, if the standard deviation of the reference method is less than 3% of span, use an EPA reference method standard deviation of 3% of span.

009.04B4(c) For either NOx or CO and at any one test level, if the mean value of the EPA reference method is less than either ten ppm or 5% of the standard, all statistical tests are waived for that emission parameter at that specific test level.

009.04B4(d) For the diluent O_2 or CO_2 and at any one test level, if the mean value of the reference method is less than 3% of span, all statistical tests are waived for that diluent parameter at that specific test level.

009.04C All requests for waivers shall be submitted to the Department for review and approval. The Director shall approve or deny each waiver request;

009.04D The owner or operator shall, for each alternative fuel fired in a unit, certify the PEMS in accordance with sections 009.04A and 009.04B unless the alternative fuel effects on NOx, CO, and O_2 (or CO_2) emissions were addressed in the model training process.

009.04E The PEMS shall be subject to the approval of the Director.

009.05 The owner or operator may vary from sections 009.03 or 009.04 if the owner or operator:

009.05A Demonstrates to the satisfaction of the Director that the alternative is substantially equivalent to the requirements; or

009.05B Demonstrates to the satisfaction of the Director that the requirement is not applicable.

010 Applying for Approval of a PEMs system

010.01 Owners or operators shall submit the following information in the application for certification or recertification of a predictive emissions monitoring system. Approval to use PEMS will be limited to the specific unit and fuel type for which certification testing was conducted. Any future change in the type or composition of the fuel, or combustion characteristics of the boiler, will require that the PEMS be recertified, unless the PEMS was initially constructed to account for different fuel types and/or compositions. In this case, fuel switching would be permitted without recertification. Owners or operators may attempt to justify that a slight change in fuel composition does not affect emissions and the PEMS does not need be recertified. The approval of such justification will be determined by the Director.

010.02 Owners or operators shall submit the following:

010.02A Source identification information including unit description, heat rate, and fuel type.

010.02B A general description of the software and hardware components of the PEMS including manufacturer, type of computer, name(s) of software product(s), and monitoring technique (e.g. method of emission correlation). Manufacturer literature and other similar information shall also be submitted, as appropriate.

010.02C A detailed description of the predictive emissions monitoring system. Identify all operational parameters or ambient conditions which are determined to have an effect on the predicted emissions. If the PEMS is developed on the basis of physical principles, identify any specific physical assumptions or mathematical manipulations made that justify suitability of the model. If the PEMS is developed on the basis of linear or nonlinear regression analysis, submit the paired raw data used in developing or training the model and specifically identify the tested operating range for every input parameter and the number of data points used in the development of the model.

010.02D A detailed description of the hardware CEMS or the reference method used during the testing period

010.02E Data collection procedures including location of the sampling probe and methods to ensure accurate representativeness of emissions being measured.

010.02F A detailed description of all PEMS operation, maintenance, and quality assurance and control procedures to be implemented.

010.02G Identification of all sensors pertaining to the PEMS and a detailed description of the sensor validation procedure and calibration frequency for each sensor.

010.02H Description of monitor reliability, accessibility, and timeliness analysis from section 011.

010.02I A description of the method used to calculate heat input, if applicable.

010.02J Data, calculations, and results of the RATA test and the statistical tests performed at all three loads and fuel types as listed under 40 CFR 75.48(a) (3).

010.02K Data plots as specified in 40 CFR 75.41(a) (9) and 75.41(c) (2) (i).

010.02L A summary of all results and calculations which demonstrates that PEMS is equivalent in performance to that of the certified hardware CEMS or EPA reference method.

011 Quality Assurance Procedure for PEMS. The owner or operator must develop and implement a quality assurance and quality control (QA/QC) manual for the PEMS and its components. The manual should include daily, quarterly, and semiannual or annual assessment procedures or operations to ensure continuous and reliable performance of the PEMS. The QA/QC manual should also include a ready and detailed specific corrective action plan that can be executed at times when the monitoring systems are inoperative. The QA/QC manual shall be placed in a readily accessible location on the plant site. Owners or operators must assign the responsibility of implementing the QA/QC manual to designated employees and must ensure at all times that these employees have the technical and practical training needed to execute this plan.

011.01 Daily Assessment. Identify any specific steps, measures, or maintenance plans that can be taken to ensure proper functioning of the monitoring systems. Develop a plan to detect any thermocouple, flow monitoring, and sensor failures. If the PEMS is developed to operate in a specific operating range, develop a plan that will ensure continuous operation within the specified operating range. It is the responsibility of the owner or operator to make sure that the model is trained over a wide range of operating parameters. Operation outside any of the operating ranges will be considered monitor downtime.

011.02 Quarterly Assessment. The owner or operator must develop and implement a plan that will ensure proper accuracy and calibration of all operational parameters that affect emissions and serve as input to the predictive monitoring system. All sensors must be calibrated as often as needed but never to exceed the time recommended by the manufacturers, for the specific applications these sensors are being used.

011.03 Semiannual or Annual Assessment. Following initial RATA, conduct RATA semiannually, pursuant to 009.04A, at normal load operations, for each unit. If the relative accuracy for the initial or most recent audit for the NO_x, CO, CO_2, (or O_2) monitors is 7.5 percent or less, subsequent RATA may be performed on an annual basis.

012 PEMS Partial Certification. In certain cases, the owner or operator may not be able to adjust all of the parameters of the model over the entire desired range of operation at one time. In this case, the owner or operator may certify the PEMS in a restricted range of operation in accordance with the PEMS certification procedure.

012.01 If, at a later date, the owner or operator wishes to operate outside the demonstrated range of the certified PEMS, the owner or operator may extend the demonstrated range by certifying at a new range within 60 days of cumulative operation of the parameter at that range.

013 Monitor downtime periods for PEMS include the following:

013.01 Operating out of range of any operational parameters that affect NOx.

013.02 One or more sensor failures

013.03 Uncertified fuel switching or fuel composition changes unless approved.

013.04 Failing the RATA or any applicable statistical tests. If a PEMS fails the RATA or statistical tests, downtime is the time corresponding to the completion of the sampling that results in the failure, until the time corresponding to the completion of the subsequent successful sampling.

013.05 Failure of any quality assurance procedure specified in accordance with 011.

013.06 Failure to complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15 minute period of emission unit operation.

014 PEMS Adjustments and Tuning. Adjustments and tuning are permissible provided that the date, reasons, and details of the PEMS adjustments are documented, submitted to the Department and the documentation placed in an accessible location on the plant site, suitable for inspection. The Department must

be able to identify, at any time, that the PEMS for any unit has been inspected, the occurrence of the last PEMS adjustment, and the last RATA performed for that unit. The PEMS must be retrained on an augmented set of data which includes the set of data used for training the model prior to adjustment and the newly collected set of data needed for adjustment of the model. When PEMS retraining is performed within the demonstrated range of certification, no RATA testing is required. No tampering with the PEMS is allowed during periods when no PEMS adjustments or tuning are being performed.

015 Notification, recordkeeping, and reporting. Owners or operators using predictive emissions monitoring systems shall maintain for each unit a file of all measurements, data, reports, and other information in a form suitable for inspection for at least five years from the date of each record.

015.01 Notification.

015.01A The owner or operator shall submit written notification to the Department in accordance with Chapter 34 of the date of any predictive emissions monitoring system (PEMS) relative accuracy test audit (RATA).

015.01B The owner or operator shall submit to the Department a copy of results of any PEMS RATA and statistical testing conducted in accordance with section 011.03.

015.02 Recordkeeping. The owner or operator shall maintain written or electronic records of the data specified below. Such records shall be kept for a period of at least five years and shall be made available upon request by authorized representatives of the Department or EPA. The PEMs monitoring records shall include:

015.02A Hourly emissions in units of the standard and fuel usage (or stack exhaust flow)

015.02B Records to verify minimum data collection requirement of one cycle of operation (sampling, analyzing and data recording) for each successive 15 minute period of emission unit operation.

015.02C Pounds per million British thermal units (lb/MMBtu) heat input;

015.02D Detailed records of any daily, quarterly, and semiannual or annual quality assurance programs or monitoring plans.

015.02E Compliance with the applicable recordkeeping requirements of 40 CFR 75.57 (d) and (e).

015.02F Compliance with the certification, quality assurance and quality control record provisions of 40 CFR 75.59, (a)(5),(6), and (7).

015.03 Reporting. The owner or operator of a unit approved to utilize a PEMS for demonstrating continuous compliance, shall report in writing to the Department on a quarterly basis the monitoring system performance and any exceedance of the applicable emission standard. All reports shall be postmarked or received by the 30th day following the end of each calendar quarter. Written reports shall include the following information:

015.03A The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the unit operating time during the reporting period;

015.03B Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, and malfunctions of the affected unit, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted;

015.03C The date and time identifying each period during which the continuous monitoring system was inoperative or down as described in section 013 and the nature of the system repairs or adjustments;

015.03D The results of any quality assurance assessments conducted during the quarter;

015.03E When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

Title 129

Chapter 34

Enabling Legislation: Neb. Rev. Stat. §§81-1504(1)(2)(11); 81-1505(12)(16)

Legal Citation: Title 129, Chapter 35, Nebraska Department of Environmental Quality

Proposed changes for December 2009 EQC on pages 34-1 through 34-3.