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.).

<u>002</u> "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:

<u>002.01</u> 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.

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

<u>002.03</u> 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.

<u>003</u> "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 <u>003.01</u> through <u>003.03</u>

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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 <u>011</u>. Instead, "baseline actual emissions" and "projected actual emissions" shall apply for those purposes.

<u>003.01</u> 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.

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

<u>003.03</u> 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.

<u>004</u> "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.

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

<u>006</u> "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.

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008 "Affected States" means all States that:

<u>008.01</u> 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

<u>008.02</u> Are a contiguous State within 50 miles of the permitted source.

- <u>009</u> "Affected unit" means a unit that is subject to emission reduction requirements or limitations under Chapter 26.
- <u>010</u> "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.
- <u>011</u> "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.
- <u>012</u> "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:

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- <u>013.01</u> 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;
- <u>013.02</u> An agency established by two or more states and having substantial powers or duties pertaining to the prevention and control of air pollution;
- <u>013.03</u> 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
- <u>013.04</u> 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.
- <u>014</u> "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

<u>015.01</u> 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:

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<u>015.01 A</u> 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);

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

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

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

<u>015.02A</u> 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.

<u>015.02B</u> An emissions unit's potential to emit shall be determined using the definition in section <u>113</u> except that the words "or enforceable as a practical matter" should be added after "federally enforceable".

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

<u>017</u> "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.

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 $\underline{018}$ "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:

<u>018.01</u> 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;

<u>018.02</u> Any term or condition of any construction permits;

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

<u>018.04</u> Any standard or other requirement established pursuant to Section <u>113</u> 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;

<u>018.05</u> Any standard or other requirement of the acid rain program under Chapter 26;

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

<u>018.07</u> 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;

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

¹⁻⁶ Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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

<u>018.10</u> 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

<u>018.11</u> 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.

<u>018.12</u> "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:

<u>019.01</u> For the purposes of Class I permits under Chapter 5, <u>001.01C</u>, 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.

<u>019.02</u> 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.

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- <u>020</u> "Baseline actual emissions" has the definition given to it in Chapter 19, section 005.
- <u>021</u> "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1)(D)(A)(ii) or (E)(iii) 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 <u>for the pollutant for which the baseline date is established, as follows:</u> equal to or greater than one (1) microgram per cubic meter (annual average) <u>of the pollutant for which the minor source baseline date is established for SO_2 , NO_2 , or PM_{10} ; or equal to or greater than 0.3 micrograms per cubic meter (annual average) for $PM_{2.5}$.</u>
- <u>022</u> "Baseline concentration" means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date.
 - <u>022.01</u> A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
 - <u>022.01A</u> The actual emissions, as defined in section <u>002</u>, representative of sources in existence on the applicable minor source baseline date, except as provided in section 022.02; and
 - <u>022.01B</u> 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.
 - <u>022.02</u> The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):
 - <u>022.02A</u> Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and
- 1-8 Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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

<u>023</u> "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.

<u>024</u> "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

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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.

<u>025</u> "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.

<u>026</u> "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.

<u>027</u> "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.

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

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- <u>029</u> "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.
- <u>030</u> "Class II source" means any source subject to the Class II permitting requirements of Chapter 5.
- <u>031</u> "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.
- <u>032</u> "CO₂ equivalent emissions (CO₂e)" shall represent an amount of greenhouse gases (GHGs) emitted, and shall be computed by the sum total of multiplying the mass amount of emissions, in tons per year (tpy), for each of the six greenhouse gases in the pollutant GHGs, by each of the gas's associated global warming potential (see definition for Global Warming Potential). For purposes of this paragraph, prior to July 20, 2014 the Director may exclude carbon dioxide emissions resulting from the combustion or decomposition of non-fossilized and biodegradable organic material originating from plants, animals, or micro-organisms (including products, by-products, residues and waste from agriculture, forestry and related industries as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material) from the mass of the greenhouse gas carbon dioxide.
- <u>033</u> "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:
 - <u>033.01</u> 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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- <u>033.01</u> 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.
- <u>034</u> "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.
- <u>035</u> "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).
- <u>036</u> "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.
- <u>037</u>"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.
- <u>038</u> "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).
- <u>039</u> "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
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electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

<u>040</u> "Control" and "controlling" means prohibition of contaminants as related to air, land, or water pollution.

<u>041</u> "Control strategy" means a plan to attain National Ambient Air Quality Standards or to prevent exceeding those standards.

042 "Council" means the Environmental Quality Council.

043"Department" means the Department of Environmental Quality.

<u>044</u> "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.

<u>045</u> "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.

<u>046</u> "Director" means the Director of the Department of Environmental Quality or his or her designee.

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<u>047</u> "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.

<u>048</u> "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.

<u>049</u> "Elevated terrain" means terrain, which may affect the calculation of good engineering practice stack height.

<u>050</u> "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.

<u>051</u> "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.

<u>052</u> "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.

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<u>053</u> "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.
- <u>054</u> "Emissions" means releases or discharges into the outdoor atmosphere of any air contaminant or combination thereof.
- <u>055</u> "Existing source" means equipment, machines, devices, articles, contrivances, or installations which are in being on the effective date of these regulations.
- <u>056</u> "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the department with authority over such lands._
- <u>057</u> "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.

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- <u>058</u> "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.
- <u>059</u> "Fixed capital cost" means the capital needed to provide all the depreciable components of a source.
- <u>060</u> "Fuel burning equipment" means any furnace, boiler, apparatus, stack and all associated equipment, used in the process of burning fuel.
- <u>061</u> "Fugitive dust" means solid airborne particulate matter emitted from any source other than a flue or stack.
- <u>062</u> "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- <u>063</u> "General permit" means a Class I or Class II operating permit that meets the requirements of Chapter 9.
- <u>064</u> "Global Warming Potential" means the ratio of the time-integrated radiative forcing from the instantaneous release of one kilogram of a trace substance relative to that of one kilogram- of a reference gas, i.e., CO₂. The pollutant greenhouse gases (GHGs) is adjusted to calculate CO₂ equivalence using "Table A-1 Global Warming Potentials" at 40 CFR 98, Subpart A, as published at 74 Federal Register 56395 on October 30, 2009.
- $\underline{065}$ "Greenhouse gases (GHGs)" means the air pollutant defined as the aggregate group of six gases: carbon dioxide (CO₂), nitrous oxide (N₂0), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).
- <u>066</u> "Hazardous air pollutant" means any air pollutant:
- 1-16 Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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066.01 listed in Appendix II, or

<u>066.02</u> 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.

- <u>067</u> "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.
- <u>068</u> "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.
- <u>069</u> "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.
- <u>070</u> "Indian Reservation" means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
- <u>071</u> "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.
- <u>072</u> "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.

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- <u>073</u> "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")
- 074 "Interstate air pollution control agency" means:
 - <u>074.01</u> An air pollution control agency established by two or more states; or
 - <u>074.02</u> An air pollution control agency of two or more political subdivisions located in different states.
- <u>075</u> "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.
- <u>076</u> "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.
- 077 "Low terrain" means any area other than high terrain.
- <u>078</u> "Lowest Achievable Emission Rate (LAER)" means, for any source, the more stringent emission rate from either:
 - <u>078.01</u> 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
 - <u>078.02</u> 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
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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.

079 "Major emissions unit" means:

<u>079.01</u> Any 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

<u>079.02</u> 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.

<u>080</u> "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.

 $\underline{080.01}$ Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds or NO_x shall be considered significant for ozone.

<u>080.02</u> A physical change or change in the method of operation shall not include:

080.02A Routine maintenance, repair and replacement;

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<u>080.02B</u> 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;

<u>080.02C</u> Use of an alternative fuel by reason of an order or rule under section 125 of the Act:

<u>080.02D</u> Use of an alternative fuel at a steam-generating unit to the extent that the fuel is generated from municipal solid waste;

<u>080.02E</u> Use of an alternative fuel or raw material by a stationary source which:

<u>080.02E1</u> 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

<u>080.02E2</u> 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;

<u>080.02F</u> 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

<u>080.02G</u> Any change in ownership at a stationary source.

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<u>080.02H</u> The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

<u>080.02H1</u> The State implementation plan for the State in which the project is located; and

<u>080.02H2</u> Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

<u>080.021</u> 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.

<u>080.02J</u> The reactivation of a very clean coal-fired electric utility team generating unit.

<u>080.03</u> 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.

 $\underline{081}$ "Major source baseline date" means, in the case of particulate matter $\underline{PM_{10}}$ and sulfur dioxide, January 6, 1975, and, in the case of nitrogen dioxide, February 8, 1988, and, in the case of $\underline{PM_{2.5}}$ October 20, 2010.

 $\underline{082}$ "Major stationary source" or "major source" means any source identified in Chapter 2.

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<u>083</u> "Maximum achievable control technology" or (MACT)" means:

<u>083.01</u> 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.

<u>083.02</u> 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.

<u>084</u> "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.

<u>085</u> "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.

 $\underline{086}$ "Minor source" means any source which is not defined as a major source in Chapter 2.

 $\underline{087}$ "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 $\underline{PM_{10}}$ and sulfur dioxide, August 7, 1977, and, in the case of nitrogen dioxide, February 8, 1988, and in the case of $\underline{PM_{2.5}}$, October 20, 2011. Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply

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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, to 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)(A)(ii) or (E)(iii) 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.

<u>088</u> "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..

<u>089</u> "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:

<u>089.01</u> Routine maintenance, repair, and replacement (except as defined as reconstruction) shall not be considered physical changes; and

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- <u>089.02</u> 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.
- <u>090</u> "National standard" means either a primary or a secondary standard established pursuant to the Act.
- <u>091</u> "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.
- 092 "Net emissions increase" means the following:
 - <u>092.01</u> With respect to any regulated NSR pollutant_emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
 - <u>092.01A</u> 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
 - <u>092.01B</u> 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 <u>005</u> except that sections <u>005.05</u> and <u>005.06</u> shall not apply.
 - <u>092.01C</u> 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
- 1-24 Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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construction of the project and the date that the increase from the project occurs.

<u>092.02</u> An increase or decrease in actual emissions is creditable only if:

<u>092.02A</u> It occurs within the contemporaneous period as defined in section <u>092.01C</u>; and

<u>092.02B</u> 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

<u>092.03</u> 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.

<u>092.04</u> An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

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

<u>092.05A</u> The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

<u>092.05B</u> It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;

<u>092.05C</u> The Director has not relied on it in issuing any permit under regulations in the State Implementation Plan approved pursuant to 40

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CFR Part 51, Subpart I or in demonstrating attainment or reasonable further progress; and

<u>092.05D</u> It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

<u>092.06</u> 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 unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

<u>092.07</u> Section <u>002.01</u> shall not apply for determining creditable increases and decreases.

<u>093</u> "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.

<u>094</u> "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.

<u>095</u> "Opacity" means a state which renders material partially or wholly impervious to rays of light and causes obstruction of an observer's view.

<u>096</u> "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.

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<u>097</u> "Owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

- <u>098</u> "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.
- <u>099</u> "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.
- 100 "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.
- 101 "PAL permit" means the construction permit issued by the Department that establishes a Plantwide Applicability Limitation (PAL) for a major stationary source.
- 102 "PAL pollutant" means the pollutant for which a Plantwide Applicability Limitation (PAL) is established at a major stationary source.
- 103 "Particulate matter(PM)" means any airborne finely divided solid or liquid material, except uncombined water, with an aerodynamic diameter smaller than 100 micrometers. PM is further classified as follows:
 - 103.01 "PM₁₀" 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.

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- 103.02 "PM_{2.5}" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on Appendix L at 40 CFR Part 50 or equivalent methods.
- 104 "Particulate matter (PM) emissions" means all finely divided solid or liquid material, other than uncombined water, particulate matter 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 this Title. PM emissions are further classified as follows:
 - 104.01 "PM₁₀ emissions" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air.
 - 104.02 "PM_{2.5} emissions" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers emitted t the ambient air.
 - 104.03 "Condensable PM (CPM) or "PM condensable" means material that is in a gaseous phase at stack conditions but which condenses and/or reacts upon cooling and dilution in the ambient air to form solid or liquid PM immediately after discharge from the stack. All CPM, if emitted from a source, is considered to be the size fraction of $PM_{2.5}$ and therefore also the size fraction of $PM_{10.2}$
 - 104.04 "Filterable PM" or "PM filterable" means particles that are directly emitted by a source as a solid or liquid at stack or release conditions and captured on the filter of a stack test train. Filterable PM₁₀ is particulate matter with an aerodynamic diameter equal to or less than 10 micrometers. Filterable PM_{2.5} is particulate matter with an aerodynamic diameter equal to or less than 2.5 micrometers; and
- 1-28 Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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104.05 PM emissions shall include only filterable PM except as otherwise specified within this Title.

104.06 PM₁₀ emissions and PM_{2.5} emissions shall include both filterable and condensable PM, except as otherwise specified within this Title. Compliance with emissions limitations for PM₁₀ and PM_{2.5} in permits issued prior to January 1, 2011, shall not be based on CPM unless required by the terms and conditions of the permit or the administrative record indicates that CPM was included as part of the basis for the emissions limitations. Applicability determinations made prior to January 1, 2011, without accounting for CPM, shall not be considered in violation of this Title.

- <u>105</u> "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.
- <u>106</u> "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.
- 107 "Permit revision" means a revision to an operating or construction permit that meets the requirements of Chapter 15.
- 108 "Permitting authority" means the Department of Environmental Quality.
- 109 "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 governmental subdivision, public or private corporation, municipality, governmental subdivision, public agency, or other legal entity.

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- 110 "Plan" means an implementation plan adopted by the State pursuant to Section 110 of the Act, to attain and maintain a national standard.
- 111 "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 <u>011</u>.
- 112 Reserved. "PM₁₀" 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.
- 113 Reserved. "PM₁₀ 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.

114 Reserved.

- 115 "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.
- <u>116</u> "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
- 1-30 Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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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.

- $\underline{117}$ "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.
- 118 "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.
- 119 "Primary standard" means a national primary ambient air quality standard identified in Chapter 4.
- <u>120</u> "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.
- <u>121</u> "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.
- <u>122</u> "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

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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.

- 123 "Project" means a physical change in, or change in method of operation of, an existing major stationary source.
- 124 "Projected actual emissions" has the definition given to it in Chapter 19, section 006.
- 125 "Proposed Class I operating permit" means the version of a permit that the Department proposes to issue and forwards to the Administrator for review.
- <u>126</u> "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.
- 127 "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.

128 "Region" means:

- <u>128.01</u> An air quality control region designated by the Administrator; or
- 1-32 Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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<u>128.02</u> Any area designated by the State as an air quality control region.

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

130 "Regulated air pollutant" means the following:

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

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

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

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

130.04A Any pollutant subject to requirements under Chapter 27, 005; and

<u>130.04B</u> Any pollutant for which the requirements relating to construction, reconstruction, and modification in Chapter 27, <u>003</u>, have been met, but only with respect to the individual source subject to these requirements.

130.05 Greenhouse gases (GHGs) as follows:

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 $\underline{130.05A}$ Beginning July 1, 2011, the GHGs emissions are at a stationary source emitting or having the potential to emit 100,000 tons CO_2e or more.

131 "Regulated NSR pollutant" means the following:

131.01 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 areprecursors for ozone); Precursors for the purpose of NSR are the following:

131.01A Volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment and nonclassifiable areas.

131.01B Sulfur dioxide and nitrogen oxides are precursors to $PM_{2.5}$ in all attainment and unclassifiable areas.

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

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

131.04 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.

131.05 Greenhouse gases (GHGs) as follows:

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<u>131.05A</u> Beginning January 2, 2011:

<u>131.05A1</u> The stationary source is a new major stationary source for a regulated NSR pollutant that is not GHGs, and also will emit or will have the potential to emit 75,000 tons per year CO_2e or more; or

 $\underline{131.05A2}$ The stationary source is an existing major stationary source for a regulated NSR pollutant that is not GHGs, and also will have an emissions increase of a regulated NSR pollutant, and an emissions increase of 75,000 tons per year CO₂e or more; and

<u>131.05B</u> Beginning July 1, 2011, in addition to the provisions in section <u>131.05A</u>:

 $\underline{131.05B1}$ The stationary source is a new stationary source that will emit or have the potential to emit 100,000 tons per year CO_2e or

 $\underline{131.05B2}$ The stationary source is an existing stationary source that emits or has the potential to emit 100,000 tons per year $\mathrm{CO}_2\mathrm{e}$ or more, when such stationary source undertakes a physical change or change in the method of operation that will result in an emissions increase of 75,000 tons per year $\mathrm{CO}_2\mathrm{e}$ or more.

131.05C The term emissions increase as used in 131.05A and 131.05B shall mean that both a significant emissions increase (as calculated in Chapter 19, section 008) and a significant net emissions increase (as defined in Chapter 1, section 092 and Chapter 19, section 010) occur. For the pollutant GHGs, an emissions increase shall be based on tons

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per year CO_2e , and shall be calculated assuming the pollutant GHGs is a regulated NSR pollutant, and "significant" is defined as 75,000 tons per year CO_2e instead of applying the value in Chapter 19, section 010.1 $\frac{7}{4}$ 8.

- 131.06 Particulate matter (PM) emissions, PM₁₀ emissions, and PM_{2.5} emissions shall include both filterable and condensable particulate matter as defined in Chapter 1. Compliance with emissions limitations for PM, PM₁₀ and PM_{2.5} in permits issued prior to January 1, 2011, shall not be based on condensable particulate matter unless required by the terms and conditions of the permit, or as described in the Fact Sheet for the permit. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this Title.
- 132 "Regulated pollutant for fee purposes" means any regulated air pollutant identified in the previous section this chapter, except for the following:
 - 132.01 Carbon monoxide;
 - 132.02 Particulate matter, excluding PM₁₀;
 - 132.03 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
 - 132.04 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.
 - 132.05 Greenhouse gases (GHGs)
- 133 "Renewal" means the process by which a permit is reissued at the end of its term.
- 1-36 Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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- 134 "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.
 - 134.01 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.
 - <u>134.02</u> The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
 - 134.03 The replacement does not change the basic design parameter(s) of the process unit.
 - <u>134.04</u> 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.
- 135 "Responsible official" means one of the following:
 - 135.01 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:

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135.01A The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

<u>135.01B</u> The delegation of authority to such representatives is approved in advance by the permitting authority;

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

135.03 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

135.04 For affected sources:

<u>135.04A</u> The designated representative in so far as actions, standards, requirements, or prohibitions under Chapter 26 are concerned; and

135.04B The designated representative for any other purposes under the Title V program.

- 136 "Rule or regulation" means any rule or regulation of the Council.
- 137 "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
- 1-38 Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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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.

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

139 "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.

140 "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

PM₁₀: 15 tpy

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PM_{2.5}: 10 tpy

Ozone: 40 tpy of volatile organic compounds or nitrogen oxides

Lead: 0.6 tpy

Fluorides: 3 tpy

Sulfuric acid mist: 7 tpy

Hydrogen sulfide (H₂S): 10 tpy

Total reduced sulfur (including H₂S): 10 tpy

Reduced sulfur compounds (including H₂S): 10 tpy

Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2x10⁻⁶ megagrams per year (3.5x10⁻⁶ 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)

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

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- <u>142</u> "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 $\underline{13740}$ 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 $\underline{0769}$.
- $\underline{143}$ "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 13740 or in the Act, whichever is lower.
- 144 "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.
- 145 "Source" means any property, real or personal, or person contributing to air pollution.
- <u>146</u> "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.
- <u>147</u> "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.
- 148 "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

Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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undertake a program of construction of the stack to be completed in a reasonable time.

- 149 "Stack height" means the distance from the ground level elevation of a stack to the elevation of the stack outlet.
- 150 "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.
- 151 "Startup of operation" means the beginning of routine operation of an affected facility.
- 152 "State" means any non-Federal permitting authority, including any local agency, interstate association, or statewide program.
- 153 "State Act" means the Nebraska Environmental Protection Act, Neb. Rev. Stat. §81-1501 through §81-1533, as amended.
- 154 "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under this Title.
- 155 "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.
- 156 "Title V program" or "State program" means a program approved by the Administrator for purposes of Title V of the Act.
- 1-42 Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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

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

159 "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.

160 "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:

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acetone;
1-chloro-1,1-difluoroethane (HCFC-142b);
Chlorodifluoromethane (CFC-22);
1-chloro-1-fluoroethane (HCFC-151a);
chlorofluoromethane (HCFC-31);
Chloropentafluoroethane (CFC-115);
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
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Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethylpentane (HFE-7300)
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1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee)

Dichlorodifluoromethane (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-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane $[(CF_3)_2CFCF_2OCH_3];$

dimethyl 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;

¹⁻⁴⁴ Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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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<sub>3</sub>F<sub>7</sub>OCH<sub>3</sub>) (known as HFE-
7000);
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<sub>3</sub>);
Methylene chloride (dichloromethane);
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-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);
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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);
Trichlorofluoromethane (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);
Trifluoromethane (FC-23); HFC-23
volatile methyl siloxanes (VMS);
and perfluorocarbon compounds which fall into the following classes:
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¹⁻⁴⁶ Changes for December 2011 EQC are on pages 1-11, 1-19, 1-27 through 1-30, 1-36. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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- 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.
- <u>161</u> "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.
- <u>162</u> "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 2 - DEFINITION OF MAJOR SOURCE

<u>001</u> Hazardous Air Pollutants. A major source of hazardous air pollutants is defined as:

<u>001.01</u> For pollutants other than radionuclides, any stationary source or any group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any hazardous air pollutant listed in Appendix II, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the Administrator of EPA may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources for hazardous air pollutants. All fugitive emissions must be considered in determining whether a stationary source is a major source.

<u>001.02</u> For radionuclides, "major source" shall have the meaning specified by the Administrator of EPA by rule.

<u>002</u> Except as otherwise expressly provided herein, a major stationary source of air pollutants is one that directly emits or has the potential to emit, 100 tpy or more of any air pollutant (including any major source of fugitive emissions of any such pollutant, as determined by rule by the Administrator of EPA). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of this subsection, unless the source belongs to one of the following categories of stationary source:

<u>002.01</u> Coal cleaning plants (with thermal dryers);

<u>002.02</u> Kraft pulp mills;

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- 002.03 Portland cement plants;
- <u>002.04</u> Primary zinc smelters;
- 002.05 Iron and steel mills;
- <u>002.06</u> Primary aluminum ore reduction plants;
- 002.07 Primary copper smelters;
- <u>002.08</u> Municipal incinerators capable of charging more than 250 tons of refuse per day;
- 002.09 Hydrofluoric, sulfuric, or nitric acid plants;
- <u>002.10</u> Petroleum refineries;
- <u>002.11</u> Lime plants;
- <u>002.12</u> Phosphate rock processing plants;
- 002.13 Coke oven batteries;
- 002.14 Sulfur recovery plants;
- 002.15 Carbon black plants (furnace process);
- 002.16 Primary lead smelters;
- 002.17 Fuel conversion plants;
- 002.18 Sintering plants;

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- <u>002.19</u> Secondary metal production plants;
- <u>002.20</u> Chemical process plants The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in North American Industry Classification System (NAICS) codes 325193 or 312140;
- <u>002.21</u> Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- <u>002.22</u> Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- 002.23 Taconite ore processing plants;
- 002.24 Glass fiber processing plants;
- 002.25 Charcoal production plants;
- <u>002.26</u> Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; or
- <u>002.27</u> Any other stationary source category which is being regulated by a standard promulgated under Section 111 or 112 of the Act, as of August 7, 1980.
- <u>003</u> A major stationary source of air pollutants is defined as one which emits, or has the potential to emit 5 tons per year or more of lead.
- <u>004</u> Any physical change that would occur at a stationary source not otherwise qualifying as a major stationary source, shall be considered a major stationary source, if the change by itself would constitute a major stationary source.
- $\underline{005}$ A major stationary source that is major for volatile organic compounds \underline{or} \underline{NO}_x shall be considered major for ozone.

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<u>006</u> A major stationary source for purposes of Chapter 17, section <u>013</u> includes:

006.01 For ozone nonattainment areas, sources with the potential to emit 100 tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tpy or more in areas classified as "serious," 25 tpy or more in areas classified as "severe," and 10 tpy or more in areas classified as "extreme"; except that the references in this paragraph to 100, 50, 25, and 10 tpy of nitrogen oxides shall not apply with respect to any source for which the Administrator of EPA has made a finding, under section 182(f)(1) or (2) of the Act, that requirements under section 182(f) of the Act do not apply;

<u>006.02</u> For ozone transport regions established pursuant to section 184 (control of ozone or interstate ozone pollution) of the Act, sources with the potential to emit 50 tpy or more of volatile organic compounds;

<u>006.03</u> For carbon monoxide nonattainment areas:

006.03A That are classified as "serious," and

<u>006.03B</u> In which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the Administrator of EPA, sources with the potential to emit 50 tpy or more of carbon monoxide; and

 $\underline{006.04}$ For particulate matter (PM₁₀) nonattainment areas classified as "serious," sources with the potential to emit 70 tpy or more of PM₁₀.

<u>007</u> Major source, for purposes of Class I operating permits, means any stationary source (or group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person (or persons under common control)) belonging to a single major industrial grouping

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and that are described in paragraph <u>001</u>, <u>002</u>, <u>003</u>, <u>004</u>, <u>005</u>, <u>006</u>, <u>008</u> or <u>009</u> of this definition. For the purposes of defining "major source", a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same major group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

<u>008</u> Major stationary source, for the purposes of the Prevention of Significant Deterioration of Air Quality Program (PSD), includes the sources described in sections <u>008.01</u> through <u>008.03</u>. Sources in the categories listed in sections <u>002.01</u> through <u>002.27</u> must include fugitive emissions in determining major source status.

008.01 Any of the following stationary sources which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, Portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants (with thermal dryers), primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in North American Industry Classification System (NAICS) codes 325193 or 312140), fossil fuel boilers (or combinations thereof) totaling more 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants.

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 $\underline{008.02}$ Notwithstanding the stationary source size specified in section $\underline{008.01}$, any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant, or

<u>008.03</u> Sources fitting the descriptions in sections <u>004</u> and <u>005</u>.

 $\underline{009}$ Major source of particulate matter, for purposes of Class I operating permits, shall be determined based on the potential to emit PM_{10} .

Legal Citation: Title 129, Ch. 2, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 129 - Department of Environmental Quality

Chapter 4 - AMBIENT AIR QUALITY STANDARDS

The ambient air quality standards for the State of Nebraska are:

001 Particulate Matter

001.01 PM₁₀

Primary and secondary standards

150 micrograms per cubic meter24 hour average with not more than one exceedance per year

(Attainment of these standards are determined in accordance with Appendix K of 40 CFR Part 50 which is adopted and incorporated herein).

001.02 PM_{2.5}

Primary and secondary standards 15.0 micrograms per cubic meter annual arithmetic mean 35 micrograms per cubic meter 24 hour average

(Attainment of these standards is determined in accordance with Appendix N of 40 CFR Part 50 which is adopted and incorporated herein).

Chapter 4 002 Sulfur dioxide

<u>002.01</u> Primary standards

80 micrograms per cubic meter (0.03 ppm) annual arithmetic mean 365 micrograms per cubic meter (0.14 ppm) maximum 24-hour concentration not to be exceeded more than once a year

002.02 Secondary standard

1300 micrograms per cubic meter (0.5 ppm) as a 3-hour concentration not to be exceeded more than once a year

003 Nitrogen dioxide

Primary and secondary standard 100 micrograms per cubic meter (0.05 ppm) annual arithmetic mean

<u>004</u> Carbon monoxide

Primary and secondary standards
10 milligrams per cubic meter (9 ppm)
as a maximum 8-hour concentration not to be exceeded
more than once a year
40 milligrams per cubic meter (35 ppm)
as a maximum 1-hour concentration not to be exceeded
more than once a year

Chapter 4 005 Ozone

Primary and secondary standard
235 micrograms per cubic meter (0.12 ppm)
as a maximum l-hour concentration not to be exceeded
more than one day a year

(Attainment of this standard is determined in accordance with Appendix H of 40 CFR Part 50; which is adopted and incorporated herein).

Primary and secondary standard 0.08 parts per million (0.08 ppm) as a daily maximum 8-hour average concentration

(Attainment of this standard is determined in accordance with Appendix I of 40 CFR Part 50; which is adopted and incorporated herein).

006 Lead

Primary and secondary standard

0.15 micrograms per cubic meter,
rolling three-month average (2008 standard)

Primary and secondary standard
1.5 micrograms per cubic meter
calendar quarter arithmetic mean (1978 standard)

Note: 1978 standard remains in effect until one year after designations are made for the 2008 standard, concurrent with the 2008 standard.

007 Total reduced sulfur

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10.0 parts per million (10.0 ppm) maximum 1 minute average concentration 0.10 parts per million (0.10 ppm) maximum 30-minute rolling average

<u>007.01</u> Except as provided in <u>007.01A</u> and <u>007.01B</u> these standards apply only where human exposure occurs.

<u>007.01A</u> Ambient concentrations of total reduced sulfur (TRS) emissions occurring as a result of natural activities that have no associated economic benefits, such as seasonal stratification or turnover of lakes and lagoons, and the release of water uncontaminated by process or industrial activity from lakes, reservoirs, lagoons and water impoundment systems shall not constitute violation of the standards contained in section 007.

<u>007.01B</u> The Department shall provide reasonable opportunity for any owner or operator of any source causing or contributing to a violation of the standards in <u>007</u> to develop and implement a program to eliminate such violations prior to taking enforcement action.

<u>007.02</u> Unless otherwise approved by the Director, the levels of TRS in the ambient air shall be measured using a TRS thermal converter in conjunction with an SO₂ monitor. The SO₂ monitor shall be designated as an EPA reference method or equivalent method in accordance with 40 CFR Part 53. In combination, the monitor must meet or exceed the following minimum specifications:

<u>007.02A</u> Lower detection limit of 0.4 ppb (parts per billion);

<u>007.02B</u> Zero Drift less than 0.5 ppb in 24 hours and less than 1 ppb in 7 days at constant conditions;

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<u>007.02C</u> Span Drift of less than 0.5 percent of the reading in 24 hours and less than 1 percent of the reading in 7 days at constant conditions;

007.02D Precision of 0.5 percent of the reading; and

<u>007.02E</u> Linearity of 1 percent of full scale.

<u>007.03</u> A rolling average shall be considered valid if there is data for at least 75 percent of the period in question. In the event that less than 100 percent of the data are available, the rolling average shall be computed on the basis of the data available using the number of data available as the divisor.

<u>007.04</u> The standards are attained when all of the following conditions are met:

<u>007.04A</u> The one-minute concentration is less than or equal to 10.0 ppm, rounded to one decimal place (fractional parts equal to or greater than 0.05 ppm must be rounded up);

<u>007.04B</u> The 30-minute rolling arithmetic mean concentration is less than or equal to 0.10 ppm, rounded to two decimal places (fractional parts equal to or greater than 0.005 ppm must be rounded up);

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

Legal Citation: Title 129, Ch. 4, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 129 - Department of Environmental Quality

Chapter 6 - EMISSIONS REPORTING; WHEN REQUIRED

<u>001</u> Every source subject to a permit requirement under Chapters 5 or 17 shall complete and submit to the Department an annual emissions inventory, if requested, on forms furnished by or acceptable to the Department by March 31, and shall include emission information for the previous calendar year. This requirement applies whether or not a permit application has been filed or a permit issued. The inventory form shall be certified in accordance with Chapter 7, section <u>008</u>.

<u>002</u> The annual emissions inventory form shall include the following information:

<u>002.01</u> The source's name, description, mailing address, contact person and contact person's phone number, and physical address and location, if different than the mailing address.

<u>002.02</u> A description of the existing (or proposed) facilities, modifications or operations including all processes employed; normal hours of operation; the nature and amounts of fuel and other materials involved; the probable nature, rate of discharge, and time duration of contaminant emissions; any such other information as is relevant to air pollution control and available or capable of being assembled in the normal course of operation; and, if required by the Director, ambient air quality and meteorological data.

<u>002.03</u> The actual quantity of emissions, including documentation of the method of measurement, calculation or estimation, of:

<u>002.03A</u> Any single regulated non-hazardous air pollutant in a quantity greater than one ton.

<u>002.03B</u> Any single regulated hazardous air pollutant in a quantity greater than the reporting level listed in Appendix II or Appendix III.

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<u>002.03C</u> Any combination of hazardous air pollutants in a quantity greater than 2.5 tons.

<u>003</u> Actual emissions as defined in Chapter 1 shall be calculated using one of the most accurate data available. Emission calculations should be done using one of the following methods, as appropriate (listed in descending order of applicability):

<u>003.01</u> Any test method or procedure identified in Chapter 34;

<u>003.021</u> Continuous emission monitor (CEM) data, provided that:

<u>003.021A</u> The CEM operation is, and has been for the reporting period, in compliance with all applicable requirements and applicable requirements under the Act;

<u>003.021B</u> The total operating time of the applicable emissions unit and the CEM are included in the inventory report; and

 $\underline{003.021C}$ The report includes an explanation of how the emissions were calculated using CEM data-; and

003.01D The CEM data has been certified and quality assured.

003.02 Any test method or procedure identified in Chapter 34 which provides the most accurate emission calculations available during the period of time over which the emissions resulted.

<u>003.03</u> Any applicable method identified in the Compilation of Air Pollutant Emission Factors, Volume I, Stationary Point and Area Sources, Fifth Edition;

<u>003.03 A manufacturer's guarantee and Material Safety Data Sheet (MSDS)</u> information.

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<u>003.04</u> Any applicable method identified in Factor Information Retrieval System Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, EPA 454/R-95-012, August 1995

003.04 A manufacturer/engineering estimate.

003.05 Any applicable method identified in the Compilation of Air Pollutant Emission Factors, Volume I, Stationary Point and Area Sources, Fifth Edition, or any applicable method identified in Factor Information Retrieval System Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, EPA-454/R-95-012, August 1995.

 $\underline{004}$ Except as otherwise provided in $\underline{003}$ above, any other test methods and procedures for use in determining actual emissions must be approved by the Director.

<u>005</u> The Director may require the submittal of supplemental information to verify or otherwise assure the quality of emissions reported.

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

Legal Citation: Title 129, Ch. 6, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 129 – Nebraska Air Quality Regulations

Chapter 19 – Prevention of Significant Deterioration of Air Quality (PSD

- <u>001</u> The following subsections of 40 CFR 52.21 published on July 1, 200409 are incorporated by reference into Chapter 19 of Title 129: (b) (34), (35), (36), (37), and (38) definitions related to clean coal technology demonstration projects; (e) Restrictions on area classifications; <u>and</u> (g) Redesignation; <u>and</u> 40 CFR 52.21 (p), "Sources impacting Federal Class I area", as published at 75 Federal Register 64906 is incorporated by reference into Chapter 19 of Title 129.
- <u>002</u> The requirements of this chapter apply to the construction of any new major stationary source or the major modification of any existing major stationary source, as defined in Chapter 2, section <u>008</u>. The provisions of this chapter apply only to sources located in areas designated as attainment or unclassifiable. Sources not subject to PSD review may still require a construction permit pursuant to provisions in Chapter 17.
- <u>003</u> Prior to beginning actual construction of a new major stationary source or a major modification of an existing major stationary source, the owner or operator must obtain a permit, issued by the Department, stating that the source will comply with the requirements of this chapter.
- <u>004</u> For any construction project at an existing major stationary source, the owner or operator must determine if the project is a major modification for a regulated NSR pollutant by assessing the following criteria:
 - <u>004.01</u> The status of each relevant emissions unit, either new or existing, as defined in Chapter 1, section <u>051</u>.
 - $\underline{004.02}$ The baseline actual emissions (BAE) for each unit, as defined in section $\underline{005}$.
 - $\underline{004.03}$ The projected actual emissions (PAE) or potential to emit (PTE) for each unit, as defined in sections $\underline{006}$ and $\underline{007}$.

Changes for December 2011 EQC are on page 19-28. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

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 $\underline{004.04}$ Whether the emissions increase (PAE (or PTE) minus BAE) is significant, as defined in section $\underline{008}$.

 $\underline{004.05}$ If the emissions increase is significant, whether the net emissions increase, as defined in section $\underline{00\$9}$, is significant as defined in section $\underline{009}$ 010.

<u>005</u> Baseline actual emissions (BAE) for a new unit is defined in section <u>005.12</u>. BAE for an existing emissions unit means the average rate, in tons per year, at which an emissions unit actually emitted the regulated NSR pollutant during any consecutive 24-month period selected by the owner or operator that is representative of normal source operation and that meets the following criteria:

<u>005.01</u> For units at an electric utility steam generating unit, within the five year period immediately preceding when the owner or operator begins actual construction of the project, unless the Department determines that a different time period within the preceding ten years is more representative of normal source operations.

<u>005.02</u> For all other units, within the ten-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Department for a permit required under this section, whichever is earlier.

<u>005.03</u> In no case may the consecutive 24-month period begin before January 1, 1996.

<u>005.04</u> The average rate per unit shall include emissions associated with startups, shutdowns, and malfunctions.

<u>005.05</u> Fugitive emissions.

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<u>005.05A</u> The average rate per unit shall include fugitive emissions, to the extent quantifiable, for sources belonging to one of the categories listed in Chapter 2, sections <u>002.01</u> through <u>002.27</u>. Fugitive emissions shall be considered quantifiable if emission factors are available or if emissions can be calculated using mass balance equations or other means deemed acceptable to the Department.

<u>005.05B</u> The average rate per unit shall not include fugitive emissions for sources not belonging to one of the categories specified in section <u>005.05A</u>.

<u>005.06</u> The average rate per unit shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

<u>005.07</u> The average rate per unit shall be adjusted downward to reflect any regulatory changes becoming effective since the beginning of the consecutive 24-month period that would have required reduced emissions for any of the emissions units being changed if the regulatory changes had been in effect during the consecutive 24-month period.

<u>005.08</u> When a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the BAE for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

<u>005.09</u> The average rate per unit shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions or for measuring non-compliant emissions, in tons per year.

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<u>005.10</u> BAE shall be calculated using the following methodologies in this order of preference where possible:

<u>005.10A</u> Continuous Emissions Monitors (CEMS) complying with requirements in Chapter 34.

<u>005.10B</u> Predictive Emissions Monitors (PEMS) complying with requirements in Chapter 34.

<u>005.10C</u> Source-specific stack test data, if such stack test occurred during the baseline period.

<u>005.10D</u> Emission factors as defined in Chapter 6, sections <u>003.03</u> and 003.04.

<u>005.10E</u> Mass Balance

<u>005.11</u> Other methodologies or a different order of preference of methodologies than those listed in <u>005.10</u> may be used to calculate the BAE with prior concurrence of the Department.

<u>005.12</u> For a new emissions unit, the BAE for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's PTE.

<u>005.13</u> For a PAL for a stationary source, the BAE shall be calculated in accordance with the procedures contained in section <u>005.01</u> through <u>005.12</u>.

<u>006</u> Projected actual emissions (PAE) is the maximum annual rate, in tons per year (consecutive 12 month period), at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five years following

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the date the unit resumes regular operation after the project. If the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant, and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source, the PAE is the maximum annual rate in any one of the ten years following the date the unit resumes regular operation after the project. To determine PAE, the owner or operator:

<u>006.01</u> Shall consider all relevant information, including but not limited to the source's historical operational data, its own representations, expected business activity and highest projections of business activity, compliance plans, and filings with state or federal regulatory authorities; and

<u>006.02</u> Shall include emissions associated with startup, shutdown, and malfunctions.

006.03 Shall consider fugitive emissions as follows:.

<u>006.03A</u> The average rate per unit shall include fugitive emissions, to the extent quantifiable, for sources belonging to one of the categories listed in Chapter 2, sections <u>002.01</u> through <u>002.27</u>. Fugitive emissions shall be considered quantifiable if emission factors are available or if emissions can be calculated using mass balance equations or other means deemed acceptable to the Department.

<u>006.03B</u> The average rate per unit shall not include fugitive emissions for sources not belonging to one of the categories specified in section <u>006.03A</u>.

<u>006.04</u> Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the

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consecutive 24-month period used to establish the BAE and that are also unrelated to the particular project, including any increased utilization due to product demand growth. The Department shall provide guidance for use by the owner or operator to determine the amount of emissions that may be attributed to demand growth.

 $\underline{006.05}$ May, in lieu of using the method set out in sections $\underline{006.01}$, $\underline{006.02}$, $\underline{006.03}$, and $\underline{006.04}$, elect to use the emissions unit's potential to emit (PTE), in tons per year, as defined in section $\underline{007}$.

<u>007</u> Potential to emit (PTE) is the maximum capacity of a major stationary source to emit a regulated NSR pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit such 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.

<u>008</u> Calculating significant emissions increase of a regulated NSR pollutant.

<u>008.01</u> Actual-to-projected-actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between PAE and BAE, for each existing emissions unit, equals or exceeds the significant amount for that pollutant, as described in section <u>010</u>.

<u>008.02</u> As an alternative to section 008.01, the actual-to-potential test may be used for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the PTE from each existing emissions unit following completion of the project and the BAE of these units before the

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project equals or exceeds the significant amount for that pollutant, as described in section 010.

<u>008.03</u> Actual-to-potential test for projects that only involve construction of a new emissions unit(s). A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the PTE from each new emissions unit following completion of the project and the BAE of these units before the project equals or exceeds the significant amount for that pollutant, as described in section 010.

<u>008.04</u> Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for all emissions units involved in the project (using the methods specified in sections <u>008.01</u>, <u>008.02</u>, and <u>008.03</u>) equals or exceeds the significant amount for that pollutant, as described in section <u>010</u>.

<u>008.05</u> For any major stationary source with a Plant-wide Applicability Limit (PAL) for a regulated NSR pollutant, the major stationary source shall comply with the requirements in section 011.

<u>009</u> If a project results in a significant emissions increase as calculated in section <u>008</u>, then a determination must be made as to whether the project also results in a significant net emissions increase. The net emissions increase is the amount over zero of the sum of the emissions increase and any other increases and decreases in actual emissions at the major stationary source that are contemporaneous (as defined in section <u>009.01</u>) with the project and are otherwise creditable. BAE for calculating such increases and decreases shall be as defined in section <u>005</u>.

 $\underline{009.01}$ An increase or decrease in actual emissions is contemporaneous with the increase from the project for which an emissions increase has been calculated in section $\underline{008}$ only if it occurs between the date five years before the source begins actual construction (as defined in Chapter 1, section $\underline{023}$) of the project and the date that the increase from the project occurs.

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<u>009.02</u> An increase or decrease is creditable only if the Department has not relied on it in issuing a PSD permit for the source which was in effect when the increase from the project occurred.

 $\underline{010}$ Significant means, in reference to an emission increase or a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

<u>010.01</u> <u>Carbon monoxide</u>: 100 tons per year of carbon monoxide;

<u>010.02</u> <u>Nitrogen oxides:</u> 40 tons per year of nitrogen oxides;

<u>010.03</u> <u>Sulfur dioxide</u>: 40 tons per year of sulfur dioxide;

<u>010.04</u> <u>Particulate matter (PM):</u> 25 tons per year of particulate matter emissions:

010.05 PM₁₀: 15 tons per year of PM₄₀ emissions;

<u>010.06</u> PM _{2.5}: 10 tons per year of direct PM2.5 emissions; 40 tons per year of sulfur dioxide emissions; 40 tons per year of nitrogen oxide emissions.

<u>010.0€7</u> <u>Ozone:</u> For ozone, 40 tons per year of volatile organic compounds or nitrogen oxides;

010.078 Lead: 0.6 tons per year of lead;

010.089 Fluoride: 3 tons per year of fluorides;

010.0910 Sulfuric acid mist: 7 tons per year of sulfuric acid mist;

010.101 Hydrogen sulfide (H₂S): 10 tons per year of hydrogen sulfide

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- <u>010.1 \pm 2</u> <u>Total reduced sulfur compounds (including H₂S):</u> 10 tons per year of total reduced sulfur compounds (including H₂S);
- <u>010.123</u> Reduced sulfur compounds (including H_2S): 10 tons per year $\frac{\text{eff}}{\text{reduced sulfur compounds (including } H_2S)}$;
- $\underline{010.134}$ For mMunicipal waste combustor organics (measured as total tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2 x 10^{-6} megagrams per year (3.5 x 10^{-6} tons per year).
- <u>010.145</u> Municipal waste combuster metals (measured as particulate matter): 14 megagrams per year (15 tons per year);
- <u>010.156</u> For mMunicipal waste combuster acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year);
- <u>010.167</u> For mMunicipal solid waste landfills emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tons per year).
- $\underline{010.178}$ For any regulated NSR pollutant not listed in sections $\underline{010.01}$ through $\underline{010.167}$: any increase is significant.
- $\underline{011}$ Actuals PALs. The term "Plantwide Applicability Limitations" (PAL) refers to an "actuals PAL" in the following sections. The Department may approve a PAL in accordance with the following requirements:
 - <u>011.01</u> A PAL may only be approved for an existing major stationary source.
 - <u>011.02</u> The PAL shall impose an annual emission limitation in tons per year that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source shall show that the sum of the monthly emissions from each emissions unit under the PAL

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for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.

- <u>011.03</u> Any physical change or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets all requirements in section <u>013</u> and complies with the provisions of the construction permit establishing the PAL:
 - <u>011.03A</u> Is not considered a major modification for the PAL pollutant; and
 - <u>011.03B</u> Is not subject to the provisions in Chapter 19, sections <u>024.02</u>.
- <u>011.04</u> Except as provided under section <u>011.03B</u>, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations and work practice requirements that were established prior to the effective date of the PAL.
- <u>011.05</u> Permit application to establish a PAL. An owner or operator of a major stationary source wishing to establish a PAL must submit to the Department the following information:
 - <u>011.05A</u> A list of all emissions units at the source and each unit's designation as small, significant or major based on its PTE.
 - <u>011.05B</u> An indication of which, if any, Federal or State applicable requirements, emission limitations, or work practices apply to each unit and, if any do so, whether such requirements, emission limitations, or work practices were taken to comply with BACT.
 - 011.05C Calculations of the BAE with supporting documentation.
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<u>011.05D</u> The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by <u>011.12</u>.

<u>011.06</u> The PAL shall be established in a construction permit in accordance with Chapter 17. The construction permit establishing the PAL shall include the following information and conditions:

<u>011.06A</u> The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

<u>011.06B</u> Each PAL shall regulate emissions of only one pollutant.

011.06C Each PAL shall have an effective period of 10 years.

<u>011.06D</u> The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in sections <u>011.12</u>, <u>011.13</u>, and <u>011.14</u> for each emissions unit under the PAL throughout the PAL effective period.

<u>011.06E</u> The PAL pollutant and the applicable source-wide emissions limitation in tons per year.

<u>011.06F</u> The PAL effective date and expiration date.

<u>011.06G</u> Specification that if the owner or operator of the source with a PAL applies to renew a PAL in accordance with section <u>011.15</u> before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised permit renewing the PAL is issued or denied by the Department.

- <u>011.06H</u> A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.
- <u>011.06I</u> A requirement that, once a PAL expires, the major stationary source is subject to the requirements under section 011.18.
- <u>011.06J</u> The calculation procedures that the owner or operator of the source shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by section <u>011.12</u>.
- <u>011.06K</u> A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provision under section <u>011.12</u>.
- <u>011.06L</u> A requirement to retain the records required under section <u>011.13</u> onsite. Such records may be retained in an electronic format.
- <u>011.06M</u> A requirement to submit the reports required under section <u>011.14</u> by the required deadlines.
- <u>011.06N</u> At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under Chapter 17, section <u>013.03</u>, unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL
- <u>011.060</u> Any other requirements that the Department deems necessary to implement and enforce the PAL.
- <u>011.07</u> Setting the PAL emissions level. The PAL level for a major stationary source shall be established as the sum of the BAE of the PAL pollutant for each emissions unit at the source; plus an amount equal to the
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applicable significant level for the PAL pollutant under section <u>010</u> or under the Act, whichever is lower. Emissions associated with units that were permanently shut down after the 24-month period used for the BAE must be subtracted from the PAL level. Emissions from units on which actual construction began after the 24-month period must be added to the PAL level in an amount equal to the PTE of the units. The Department shall specify a reduced PAL level in tons per year in the construction permit establishing the PAL to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the Department is aware of prior to issuance of the construction permit establishing the PAL.

<u>011.08</u> During the PAL effective period, the Department is required to reopen the construction permit to:

<u>011.08A</u> Correct typographical or calculation errors made in setting the PAL or to reflect a more accurate determination of emissions used to establish the PAL.

<u>011.08B</u> Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under Chapter 17, section <u>013.03</u>.

<u>011.08C</u> Revise the PAL to reflect an increase in the PAL as provided in section <u>011.11</u>.

<u>011.09</u> During the PAL effective period the Department may, at its discretion, reopen the construction permit to:

<u>011.09A</u> Reduce the PAL to reflect newly applicable Federal requirements with compliance dates after the PAL effective date.

<u>011.09B</u> Reduce the PAL consistent with any other requirement, such as statute, rule, or court decision that is enforceable as a practical matter.

<u>011.09C</u> Reduce the PAL if the Department determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an Air Quality Related Values (AQRV) that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.

<u>011.10</u> Except for the permit reopening to correct typographical errors or calculation errors that do not increase the PAL level, all reopenings shall be carried out in accordance with public participation procedures in Chapter 14.

<u>011.11</u> Increasing a PAL emission limitation during the PAL effective period.

<u>011.11A</u> A PAL emission limitation may be increased during the PAL effective period only if the owner or operator of the major stationary source complies with the following:

<u>011.11A1</u> The owner or operator shall submit a complete construction permit application to request an increase in the PAL limit for a PAL major modification. The application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.

<u>011.11A2</u> As part of this application, the owner or operator shall demonstrate that the sum of the BAE of the small emissions units, plus the sum of the BAE of the significant and major emissions units (assuming application of BACT

equivalent controls), plus the sum of the allowable emissions of the new or modified emissions unit(s), exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT with which that emissions unit must currently comply.

<u>011.11A3</u> The owner or operator must obtain a major PSD permit for all emissions unit(s) identified in section <u>011.11A1</u>, without regard to whether the increase in emissions for the unit will be significant. These emissions unit(s) shall comply with any emissions requirements resulting from the major PSD process, even though they have also become subject to the PAL or continue to be subject to the PAL.

<u>011.11A4</u> The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

<u>011.11B</u> The Department shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the BAE of the significant and major emissions units (assuming application of BACT equivalent controls), plus the sum of the BAE of the small emissions units.

<u>011.11C</u> The construction permit reflecting the increased PAL level shall be issued pursuant to compliance with requirements for public participation in Chapter 14.

<u>011.12</u> Monitoring requirements for PALS. Each operating permit that includes a PAL must contain enforceable requirements for the monitoring system that accurately determines plant-wide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for a PAL must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the permit that includes the PAL. Failure to use a monitoring system that meets the requirements of section <u>011.12</u> renders the PAL invalid. The PAL monitoring system must employ one of the monitoring approaches listed in sections <u>011.12A</u> through <u>011.12D</u> or an alternative approach approved by the Department:

011.12A CEMS which meet the following requirements:

<u>011.12A1</u> CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

<u>011.12A2</u> CEMS must sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.

011.12B PEMS which meet the following requirements:

<u>011.12B1</u> Any PEMS must be approved for use by the Department in accordance with Chapter 34, section <u>009</u>.

<u>011.12B2</u> Any PEMS approved for use in accordance with Chapter 34, section <u>009</u> must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Department, while the emissions unit is operating.

011.12C Emissions factors which meet the following requirements:

- <u>011.12C1</u> All emissions factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
- <u>011.12C2</u> The emissions unit shall operate within the designated range of use for the emissions factor if applicable; and
- <u>011.12C3</u> If technically practicable, the owner or operator of a significant emissions unit that relies on an emissions factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emissions factor in accordance with Chapter 34, section <u>007</u>, unless the Department determines that such testing is not required.
- <u>011.12D</u> Mass balance calculations for activities using coatings or solvents which meet the following requirements:
 - <u>011.12D1</u> Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
 - <u>011.12D2</u> Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
 - <u>011.12D3</u> Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Department determines there is sitespecific data or a site-specific monitoring program to support another content within the range.

- <u>011.12E</u> An owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the permit.
- <u>011.12F</u> Notwithstanding the requirements in sections <u>011.12A</u> through <u>011.12D</u>, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Department shall, at the time of permit issuance:
 - <u>011.12F1</u> Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or
 - <u>011.12F2</u> Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.
- <u>011.12G</u> Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Department. Such testing must occur at least once every five years after issuance of the PAL.
- <u>011.13</u> Recordkeeping requirements. The construction permit which contains the PAL shall require the owner or operator to retain a copy of all records necessary to determine compliance with any requirement of section 011 and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five years from the date of such record. Such permit shall also require the owner or operator to retain a copy of the
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following records, for the duration of the PAL effective period plus five years:

- <u>011.13A</u> A copy of the permit application requesting a PAL and applications for revisions to the PAL; and
- <u>011.13B</u> Each annual certification of compliance pursuant to Chapter 8, section <u>012.05</u> and the data relied on in certifying the compliance.
- <u>011.14</u> Reporting and notification requirements. The owner or operator shall submit the following reports to the Department in accordance with Chapter 8, sections <u>004.03</u> and <u>004.04</u>:
 - <u>011.14A</u> Semiannual report. The semiannual report shall be submitted to the Department within 30 days of the end of each reporting period. This report shall contain the following information:
 - <u>011.14A1</u> The identification of the owner or operator and the permit number.
 - <u>011.14A2</u> Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to section <u>011.13</u>.
 - <u>011.14A3</u> All data relied upon, including but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions.
 - <u>011.14A4</u> A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
 - <u>011.14A5</u> The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with

zero and span calibration checks), and any corrective action taken.

<u>011.14A6</u> A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by section <u>011.12E</u>.

<u>011.14A7</u> A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

<u>011.14B</u> Deviation report. The owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to Chapter 8, section <u>004.03B</u> including time limits, shall satisfy this reporting requirement. The reports shall contain the following information:

<u>011.14B1</u> The identification of the owner or operator and the permit number;

<u>011.14B2</u> The PAL requirement that experienced the deviation or that was exceeded;

<u>011.14B3</u> Emissions resulting from the deviation or the exceedance; and

<u>011.14B4</u> A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

<u>011.14C</u> Re-validation results. The owner or operator shall submit to the Department the results of any re-validation test or method within 45 days after completion of such test or method.

<u>011.15</u> PAL Renewal. The owner or operator of a source with a PAL may apply for PAL renewal no sooner that 18 months and no later than six months prior to the end of the PAL effective period. If the owner or operator submits a complete application for renewal within this time period, the PAL shall continue to be effective until the revised permit with the renewed PAL is issued or denied. A complete application shall consist of the following:

<u>011.15A</u> All of the information required for an initial application as listed in section 011.05.

011.15B A proposed PAL level.

<u>011.15C</u> The sum of the PTE of all emissions units under the PAL, with supporting documentation.

<u>011.15D</u> Any other information the owner or operator wants the Department to consider in determining the appropriate level for renewing the PAL.

<u>011.16</u> The Department shall follow the procedures specified in Chapter 14 in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Department.

<u>011.17</u> Adjusting the PAL at the time of renewal

<u>011.17A</u> If the emissions level calculated in accordance with section <u>011.07</u> at the time of renewal is equal to or greater than 80 percent of the currently permitted PAL level, the Department may renew the PAL at the currently permitted level without considering the factors set forth in section 011.17B.

<u>011.17B</u> At the Department's discretion, it may set the PAL at a level that it determines to be more representative of the source's BAE, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Department in its written rationale.

<u>011.17C</u> Notwithstanding the discretion allowed in sections <u>011.17A</u> and 011.17B,

<u>011.17C1</u> If the PTE of the source is less than the PAL, the Department shall adjust the PAL to a level no greater than the PTE of the source.

<u>011.17C2</u> The Department shall not approve a renewed PAL level higher than the current PAL, unless the source has complied with the provisions of section <u>011.11</u>.

<u>011.17D</u> If the compliance date for a State or Federal requirement that applied to the PAL source occurs during the PAL effective period, and if the Department has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL renewal or operating permit renewal which ever occurs first.

<u>011.18</u> Expiration of a PAL.Any PAL that is not renewed in accordance with the procedures in section <u>011.15</u> shall expire at the end of the PAL effective period and the requirements in section <u>011.18</u> shall apply. If an application for PAL renewal is denied, the PAL shall expire on the date the application is denied and the requirements in section 011.18 shall apply:

<u>011.18A</u> Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emissions limitation under a new construction permit established as a major modification, as specified below:

<u>011.18A1</u> Within the time frame specified for PAL renewals in section <u>011.15</u>, the source shall submit a proposed allowable emissions limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Department) by distributing the PAL allowable emissions for the source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under section <u>011.17D</u>, such distribution shall be made as if the PAL had been adjusted.

<u>011.18A2</u> The Department shall decide whether and how the PAL allowable emissions will be distributed and issue a construction permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Department determines is appropriate.

<u>011.18B</u> Each emissions unit(s) shall comply with the allowable emissions limitation on a 12-month rolling basis. The Department may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS or PEMS to demonstrate compliance with the allowable emissions limitation.

- <u>011.18C</u> Until the Department issues the new construction permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under section <u>011.18A</u>, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emissions limitation.
- <u>011.18D</u> Any physical change or change in the method of operation at the major stationary source will be subject to major PSD requirements if such change meets the definition of major modification in Chapter 1, section <u>076</u>.
- <u>011.18E</u> The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements that may have applied either during the PAL effective period or prior to the PAL effective period except for those emissions limitations that had been established pursuant to section <u>024.02</u>, but were eliminated by the PAL in accordance with section <u>011.11</u>.
- <u>012</u> Ambient air increments. For any period other than an annual period listed below, the applicable maximum allowable increase may be exceeded during one such period per year at any one location. In any area of the state, increases in pollutant concentration over the baseline concentration shall be limited to the following:
 - 012.01 PM _{2.5} annual arithmetic mean: 4 micrograms per cubic meter
 - 012.02 PM_{2.5.24} hour maximum: 9 micrograms per cubic meter
 - 012.0\(\frac{1}{2}\) PM₁₀, annual arithmetic mean: 17 micrograms per cubic meter
 - $\underline{012.024}$ PM₁₀, 24 hour maximum: 30 micrograms per cubic meter
 - <u>012.035</u> Sulfur dioxide, annual arithmetic mean: 20 micrograms per cubic meter
- 19-24 Changes for December 2011 EQC are on page 19-28. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

- <u>012.046</u> Sulfur dioxide, 24 hour maximum: 91 micrograms per cubic meter
- <u>012.0€7</u> Sulfur dioxide, 3 hour maximum: 512 micrograms per cubic meter
- <u>012.078</u> Nitrogen dioxide, annual arithmetic mean: 25 micrograms per cubic meter
- 013 Ambient air ceilings. No concentration of a pollutant shall exceed:
 - <u>013.01</u> The concentration permitted under the national secondary ambient air quality standard, or
 - <u>013.02</u> The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.
- <u>014</u> Exclusions from increment consumption. The concentrations listed in sections <u>014.01</u> through <u>014.04</u> shall be excluded in determining compliance with a maximum allowable increase. No exclusions of concentrations referred to in sections <u>014.01</u> and <u>014.02</u> shall apply more than five years after the effective date of the applicable order or plan.
 - <u>014.01</u> Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under section 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order.
 - <u>014.02</u> Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

- <u>014.03</u> Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources; and
- <u>014.04</u> The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.
- <u>015</u> Stack heights. Requirements for control of pollutants under this chapter shall be in accordance with Chapter 16.
- $\underline{016}$ Exemptions for particular major stationary source or major modification. The requirements of sections $\underline{017}$ through $\underline{024}$ shall not apply to a particular major stationary source or major modification if:
 - <u>016.01</u> The source or major modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution and the Governor of the State of Nebraska requests that it be exempt from those requirements;
 - <u>016.02</u> The source or major modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the PTE of the stationary source or modification and the source does not belong to any of the categories listed in Chapter 2, sections <u>002.01</u> through <u>002.27</u>.
 - <u>016.03</u> The source or major modification is a portable stationary source which has previously received a permit under requirements equivalent to those in sections <u>017</u> through <u>024</u>, if
 - <u>016.03A</u> The owner or operator proposes to temporarily relocate the source so that emissions at the new location would be temporary; and
 - <u>016.03B</u> The emissions for the source would not exceed its allowable emissions; and
- 19-26 Changes for December 2011 EQC are on page 19-28. Changes adopted in June, 2011, returned by the Attorney General, and being reheard in December 2011, are shown with double strikeouts or double underscores.

<u>016.03C</u> The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

<u>016.03D</u> Notice of relocation is given to the Department in accordance with Chapter 10.

<u>016.04</u> Requirements equivalent to those in sections <u>017</u> through <u>024</u> do not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or major modification is located in an area designated as nonattainment under section 107 of the Act.

<u>016.05</u> Requirements equivalent to those contained in sections <u>018</u>, <u>020</u>, and <u>022</u> do not apply to a proposed major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from a new source, or the net emissions increase of that pollutant from a major modification, would be temporary and impact no Class I area and no area where an applicable increment is known to be violated.

<u>016.06</u> Requirements equivalent to those contained in sections <u>018</u>, <u>020</u>, and <u>022</u> as they relate to any maximum allowable increase for a Class II area do not apply to a modification of a major stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of BACT would be less than 50 tons per year.

 $\underline{016.07}$ The Department may exempt a proposed major stationary source or major modification from the requirements of section $\underline{020}$, with respect to monitoring for a particular pollutant, if:

<u>016.07A</u> The emissions increase of the pollutant from a new stationary source or the net emissions increase of the pollutant from a

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major modification would cause, in any area, air quality impacts less than the following amounts:

<u>016.07A1</u> Carbon monoxide – 575 micrograms per cubic meter, 8-hour average;

<u>016.07A2</u> Nitrogen dioxide – 14 micrograms per cubic meter, annual average;

<u>016.07A3</u> <u>PM2.5 – 4 micrograms per cubic meter, 24-hour average;</u>

 $\underline{016.07A34}$ Particulate matter $\underline{PM_{10}} - 10$ micrograms per cubic meter of $\underline{PM_{10}}$, 24-hour average;

<u>016.07A45</u> Sulfur dioxide – 13 micrograms per cubic meter, 24-hour average;

<u>016.07A</u> $\frac{5}{6}$ Ozone – no de minimis air quality level is provided for ozone. However, any net increase of 100 tons per year or more of VOCs <u>or NO_x</u> subject to PSD would be required to perform an ambient impact analysis, including the gathering of ambient air quality data.

 $\underline{016.07A}$ €7 Lead - 0.1 micrograms per cubic meter, 3-month average;

 $\underline{016.07A78}$ Fluorides – 0.25 micrograms per cubic meter, 24-hour average;

<u>016.07A\u00e99</u> Total reduced sulfur – 10 micrograms per cubic meter, 1-hour average;

 $\underline{016.07A910}$ Hydrogen sulfide – 0.2 micrograms per cubic meter, 1-hour average;

 $\underline{016.07A1}$ Reduced sulfur compounds – 10 micrograms per cubic meter, 1-hour average; or

<u>016.07B</u> The concentrations of the pollutant in the area that the source or major modification would affect are less than the concentrations listed in section <u>016.07A</u>; or

016.07C The pollutant is not listed in section 016.07A.

<u>016.08</u> Permitting requirements equivalent to those contained in section <u>018.01B</u> do not apply to a stationary source or modification with respect to any maximum allowable increase for nitrogen oxides if the owner or operator of the source or modification submitted an application for a permit under the applicable permit program approved or promulgated under the Act before the provisions embodying the maximum allowable increase took effect as part of the plan and the Department subsequently determined that the application as submitted before that date was complete.

<u>016.09</u> Permitting requirements equivalent to those contained in section <u>018.01B</u> shall not apply to a stationary source or modification with respect to_any maximum allowable increase for PM_{10} if the owner or operator of the source or modification submitted an application for a permit under the applicable permit program approved under the Act before the provisions embodying the maximum allowable increases for PM_{10} took effect as part of the plan, and the Department subsequently determined that the application as submitted before that date was complete. Instead, the applicable requirements equivalent to <u>paragraph</u> <u>section 018.0≥1B</u> shall apply with respect to the maximum allowable increases for TSP as in effect on the date the application was submitted.

017 Control technology review.

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<u>017.01</u> A major stationary source or major modification shall meet each applicable emissions limitation under the SIP and each applicable emission standard and standard of performance under Chapters 18 and 23.

<u>017.02</u> A new major stationary source shall apply best available control technology (BACT) for each regulated NSR pollutant that it would have the potential to emit in significant amounts.

<u>017.03</u> A major modification shall apply BACT for each regulated NSR pollutant for which it would be a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

<u>017.04</u> For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the earliest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of BACT for the source.

018 Source impact analysis.

<u>018.01</u> <u>Required Demonstration</u>. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions, (including secondary emissions) would not cause or contribute to air pollution in violation of

<u>018.01A</u> Any national ambient air quality standard in any air quality control region; or

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<u>018.01B</u> Any applicable maximum allowable increase over the baseline concentration in any area.

<u>018.02</u> Significant impact levels. For purposes of $PM_{2.5}$, the demonstration required in section 018.01 of this chapter is deemed to have been made if the emissions increases of the new stationary source alone or from the modification alone would cause, in all areas, air quality impacts less than the following amounts:

<u>018.02A PM_{2.5} – 0.3 micrograms per cubic meter, annual average;</u>

018.02B PM_{2.5} - 1.2 micrograms per cubic meter, 24-hour average

019 Air quality models.

<u>019.01</u> All applications of air quality modeling referred to in Chapter 19 shall be based on the applicable models, data bases, and other requirements specified in 40 CFR 51, appendix W (Guideline on Air Quality Models).

<u>019.02</u> Where an air quality model specified in 40 CFR 51, appendix W (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis adopted by the Department. Written approval of the Administrator must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures set forth in Chapter 14.

020 Air quality analysis.

020.01 Pre-application analysis.

<u>020.01A</u> Any application for a major PSD permit shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

<u>020.01A1</u> For the source, each pollutant that it would have the potential to emit in a significant amount;

<u>020.01A2</u> For the major modification, each pollutant for which it would result in a significant net emissions increase.

<u>020.01B</u> With respect to any pollutant for which no NAAQS exists, the analysis shall contain such air quality monitoring data as the Department determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

<u>020.01C</u> With respect to any pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

<u>020.01D</u> The continuous air monitoring data that is required shall have been gathered over a period of one year and shall represent the year preceding receipt of the application, except that, if the Department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not less than four months), the data that is required shall have been gathered over at least that shorter period.

<u>020.01E</u> The owner or operator of a proposed major stationary source or major modification of volatile organic compounds (VOCs) who

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satisfies all conditions of Chapter 17, section <u>013</u>, may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under section 020.01.

<u>020.02</u> Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or major modification, conduct such ambient monitoring as the Department determines is necessary to determine the effect emissions from the stationary source or major modification may have, or are having, on air quality in any area.

<u>020.03</u> Operation of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of 40 CFR 58, Appendix B during the operation of monitoring stations for purposes of satisfying the requirements of section <u>020</u>.

021 Source information.

<u>021.01</u> The owner or operator of a proposed source or major modification shall submit all information necessary to perform any analysis or make any determination required under procedures established in accordance with Chapter 19. Such information shall include

<u>021.01A</u> A description of the nature, location, design capacity, and typical operating schedule of the source or major modification, including specifications and drawings showing its design and plant layout;

<u>021.01B</u> A detailed schedule for construction of the source or major modification:

<u>021.01C</u> A detailed description as to what system of continuous emission reduction is planned by the source or major modification, emissions estimates, and any other information as necessary to determine that BACT as applicable would be applied.

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<u>021.02</u> Upon request by the Department, the owner or operator shall also provide information on

<u>021.02A</u> The air quality impact of the source or major modification, including meteorological and topographical data necessary to estimate such impact; and

<u>021.02B</u> The air quality impacts and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or major modification would affect.

<u>022</u> Additional impact analyses.

<u>022.01</u> The owner or operator shall provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial, and other growth associated with the source or major modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

<u>022.02</u> The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the source or major modification.

023 Notification to permit applicants and public

<u>023.01</u> The Department shall determine if a permit application is complete within 60 days after receipt of the application and so notify the applicant. If the Department determines that the application is <u>not in</u>complete and additional information is necessary to evaluate or take final action on the application, the Department may request such information in writing and set

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a reasonable deadline for a response. The Department may determine that an application is complete, but later determine that additional information is needed to evaluate or take final action on the application.

<u>023.02</u> If the Department does not determine that the application is <u>not</u> <u>in</u>complete, the application is automatically deemed to be complete 60 days after it was received by the Department. Nothing in this section shall prohibit the Department from requesting additional information that is necessary to evaluate or take final action on the application or release the applicant from providing such information.

<u>023.03</u> Within one year after receipt of a complete application, the Department shall make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

<u>023.04</u> The Department shall provide opportunity to the public to submit comments or request a public hearing on every PSD permit application approved or approved with conditions, in accordance with section <u>010</u> of Chapter 14.

<u>024</u> Source obligation.

<u>024.01</u> Approval to construct and issuance of a major PSD construction permit shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state or Federal law.

<u>024.02</u> At any time that a source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of sections <u>016</u> through <u>024</u> shall apply to the source or modification as though construction had not yet commenced on the source or modification.

<u>024.03</u> The following provisions apply to projects at existing emissions units at a major stationary source where the project is not a part of a major modification and where the owner or operator elects to use the method specified in sections <u>006.01</u> through <u>006.04</u> for calculating projected actual emissions.

<u>024.03A</u> Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

024.03A1 A description of the project;

<u>024.03A2</u> Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

<u>024.03A3</u> The applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the BAE, the PAE, and any netting calculations if applicable. The owner or operator must also include the amount of emissions excluded due to demand growth, as defined in section <u>006.04</u>, and an explanation for why such amount was excluded.

<u>024.03B</u> Before beginning actual construction, the owner or operator shall meet face-to-face with a Department representative to discuss the PAE determination, and shall provide a copy of the information set out in section <u>024.03A</u> to the Department. The owner or operator of such a unit is not required to obtain any determination from the Department before beginning actual construction.

 $\underline{024.03C}$ The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in section

<u>024.03A2</u> and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR pollutant at such emissions unit.

<u>024.03D</u> If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Department within 60 days after the end of each calendar year during which records must be generated under section <u>024.03C</u>, setting out the unit's annual emissions during the calendar year that preceded submission of the report.

<u>024.03E</u> If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Department if the annual emissions, in tons per year, from the project identified in section <u>024.03A</u> exceed the BAE (as documented and maintained pursuant to section <u>024.03A3</u>) by 80 percent of the significant amount for that regulated NSR pollutant, as listed in section <u>010</u>. Such report shall be submitted to the Department within 60 days after the end of such calendar year. The report shall contain the following:

<u>024.03E1</u> The name, address and telephone number of the major stationary source;

 $\underline{024.03E2}$ The annual emissions as calculated pursuant to section $\underline{024.03E}$.

<u>024.03E3</u> An explanation as to whether the emissions differ from the preconstruction projections, and, if so, why.

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<u>024.03F</u> A PSD construction permit is required for each unit with annual net emissions of a regulated NSR pollutant exceeding the significant level listed in section <u>010</u> notwithstanding PAE below the significant level.

<u>024.04</u> The owner or operator shall make the information required to be documented and maintained pursuant to section <u>024.03</u> available for review upon request for inspection by the Department or the general public pursuant to the requirements contained in Chapter 14.

<u>025</u> If any provisions of this section, or the application of such provision to any person or circumstance, is held invalid, the remainder of this section, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

Enabling Legislation: Neb.Rev.Stat. §§81-1504(1)(2); 81-1505(12) Legal Citation: Title 129, Ch.19, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 129 - Department of Environmental Quality

Chapter 20 - PARTICULATE <u>MATTER</u> EMISSIONS; LIMITATIONS AND STANDARDS (EXCEPTIONS DUE TO BREAKDOWNS OR SCHEDULED MAINTENANCE: SEE CHAPTER 35)

<u>001</u> No person shall cause, suffer, allow or permit the emission of particulates particulate matter (PM) emissions from any processing machine, equipment, device or other articles, or combination thereof, except indirect heating equipment and incinerators, in excess of the amounts allowed in Table 20-2 during any one hour.

<u>002</u> No person shall cause or allow particulate matter <u>PM emissions</u> caused by the combustion of fuel to be emitted from any stack or chimney into the outdoor atmosphere in excess of the hourly rate set forth in Table 20-1:

Table 20-1

Total Heat Input in Million British Thermal Units Per Hour (MMBtu/Hr)	Maximum Allowable Emissions of Particulate Matter in Pounds per Million British Thermal Un (lb/MMBtu)		
10 or less	0.60		
Between 10 and 10,000	$\frac{1.026}{I^{0.233}}$ I = The total heat input in MMBtu/Hr		
10,000 or more	0.12		

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<u>003</u> For the purpose of these regulations, the total heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or chimney, or the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel burning units at a plant or on a premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted <u>PM emissions</u>.

<u>004</u> No person shall cause or allow emissions, from any source, which are of an opacity equal to or greater than twenty percent (20%), as evaluated by an EPA-approved method, or recorded by a continuous opacity monitoring system operated and maintained pursuant to 40 CFR Part 60 Appendix B except as provided for in section <u>005</u> of this chapter.

005 Exceptions:

<u>005.01</u> No person shall cause or allow emissions from any existing teepee waste wood burner which are of an opacity equal to or greater than forty percent (40%).

 $\underline{005.02}$ No person shall cause or allow emissions from any existing alfalfa dehydration plant dryer which are of an opacity equal to or greater than thirty percent (30%).

<u>005.03</u> Emission sources subject to monitoring requirements of Chapter 34, <u>005</u> of this Title are allowed to have one six minute period per hour of not more than 27 percent opacity.

<u>005.04</u> Furnaces owned and operated by a law enforcement agency to dispose of ammunition, fireworks or similar flammable or explosive materials are exempt from the provisions of this Chapter solely while being used for this purpose.

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 $\underline{006}$ All sources shall comply with section $\underline{004}$ of this Chapter unless an opacity standard applies as specified elsewhere in this Title.

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Table 20-2

_	1 4010 20-2							
	Process Weight		Rate of	Process Weight		Rate of		
	Rate		Emissions	Rate		Emissions		
	Lb/Hr	Tons/Hr	Lb/Hr	Lb/Hr	Tons/Hr	Lb/Hr		
	100	0.05	0.551	16,000	8.000	16.5		
	200	0.10	0.877	18,000	9.00	17.9		
	400	0.20	1.40	20,000	10.	19.2		
	600	0.30	1.83	30,000	15.	25.2		
	800	0.40	2.22	40,000	20.	30.5		
	1,000	0.50	2.58	50,000	25.	35.4		
	1,500	0.75	3.38	60,000	30.	40.0		
	2,000	1.00	4.10	70,000	35.	41.3		
	2,500	1.25	4.76	80,000	40.	42.5		
	3,000	1.50	5.38	90,000	45.	43.6		
	3,500	1.75	5.96	100,000	50.	44.6		
	4,000	2.00	6.52	120,000	60.	46.3		
	5,000	2.50	7.58	140,000	70.	47.8		
	6,000	3.00	8.56	160,000	80.	49.0		
	7,000	3.50	9.49	200,000	100.	51.2		
	8,000	4.00	10.4	1,000,000	500.	69.0		
	9,000	4.50	11.2	2,000,000	1,000.	77.6		
	10,000	5.00	12.0	6,000,000	3,000.	92.7		
	12,000	6.00	13.6					

Interpolation of the data in this table for process weight rates up to 60,000 Lb/Hr shall be accomplished by use of the equation $E=4.10~p^{.67}$ and interpolation and extrapolation of the data for process weight rates in excess of 60,000 Lb/Hr shall be accomplished by use of the equation $E=55.0~p^{.11}$ -40, where E= rate of emission in Lb/Hr and P= process weight rate in Tons/Hr. If two or more units discharge into a single stack, the allowable emission rate will be determined by the sum of all process weights discharging into the single stack.

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

Legal Citation: Title 129, Ch. 20, Nebraska Department of Environmental

Quality

Title 129 – NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 22 - INCINERATORS; EMISSION STANDARDS

- $\underline{001}$ The provisions of this chapter shall apply to all new and existing incinerators except for those listed in sections $\underline{001.01}$ through $\underline{001.05}$. Incinerators not included in the exceptions listed in sections $\underline{001.01}$ through $\underline{001.05}$ must comply with construction permit requirements listed in Chapter 17, section $\underline{001.03}$.
 - <u>001.01</u> 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 Incinerators used solely for space heating.
 - 001.03 Incinerators used to burn hazardous waste and subject to regulations under Nebraska Administrative Code Title 128, Chapter 7, section <u>008</u>.
 - <u>001.04</u> Furnaces used for law enforcement purposes specified in definition of "incinerator" in Chapter 1.
 - <u>001.05</u> Air curtain incinerators subject to Chapter 18 sections 001.68 or 001.69 or which operate in compliance with Chapter 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.
 - $\underline{001.05A}$ Air curtain incinerators must meet additional requirements in section $\underline{007}$.
- <u>002</u> No person shall cause or permit <u>emissions of particulate matter <u>emissions</u> 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.</u>
- <u>003</u> 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.
- <u>004</u> 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.
- <u>005</u> 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.

<u>006</u> Except as provided in <u>006.01</u> and <u>006.02</u> 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.

<u>006.01</u> 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.

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

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

<u>007.01</u> 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:

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

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

<u>007.02</u> 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:

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

<u>007.03B</u> Conducting an initial test for opacity as specified in 40 CFR 60.8.

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

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

<u>007.04A</u> Notification of intent to construct the air curtain incinerator.

007.04B Planned initial startup date.

<u>007.04C</u> Types of materials to be burned in the air curtain incinerator.

<u>007.05</u> Recordkeeping requirements for air curtain incinerators:

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

 $\underline{007.05B}$ Make all records available for submittal t the Director or for an inspector's onsite review.

<u>007.05C</u> 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.

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

<u>007.05E</u> 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)

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