SECTION 12.2: PERMIT REQUIREMENTS FOR MAJOR SOURCES IN ATTAINMENT AREAS (PREVENTION OF SIGNIFICANT DETERIORATION)

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12.2 Prevention of Significant Deterioration in Attainment Areas

12.2.1 Applicability Procedures

12.2.1.1 **Preconstruction Review Requirements**

The preconstruction review requirements of Section 12.2 shall apply to the construction of any new major stationary source, or any project at an existing major stationary source, within the limits set forth in Section 12.2.1.4, in an area designated as attainment or unclassifiable under Sections 107(d)(1)(A)(ii) or (iii) of the Act.

12.2.1.2 Construction of Major Stationary Sources or Modifications

The requirements of Sections 12.2.9 through 12.2.17 apply to the construction of any new major stationary source, or the major modification of any existing major stationary source, except as Section 12.2 otherwise provides.

12.2.1.3 Authority to Construct Permit Requirement

No new major stationary source or major modification to which the requirements of Sections 12.2.9 through 12.2.17 apply shall begin actual construction without an Authority to Construct Permit issued pursuant to Section 12.4 that states that the major stationary source or major modification will meet those requirements.

12.2.1.4 Projects

The requirements of Section 12.2 apply to projects at major stationary sources in accordance with the principles set out in paragraphs (a) through (e) below:

- (a) Except as otherwise provided in Section 12.2.1.5, a project is a major modification for a regulated NSR pollutant if it causes two (2) types of emissions increases: a significant emissions increase, and a significant net emissions increase. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.
- (b) The procedure for calculating (before beginning actual construction) whether a significant emissions increase will occur depends upon the type of emissions units being added or modified as part of the project, according to paragraphs (c) through (e) of Section 12.2.1.4. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major

stationary source is contained in the definition of net emissions increase. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

- (c) 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 the projected actual emissions and the baseline actual emissions for each existing emissions unit equals or exceeds the significant amount for that pollutant.
- (d) 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 potential to emit from each new emissions unit following completion of the project and the baseline actual emissions of these units before the project equals or exceeds the significant amount for that pollutant.
- (e) **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 each emissions unit, using the method specified in paragraph (c) or (d) of Section 12.2.1.4, as applicable with respect to each emissions unit, equals or exceeds the significant amount for that pollutant.

12.2.1.5 Major Sources with Plantwide Applicability Limitations

For any major stationary source for a Plantwide Applicability Limitation (PAL) for a regulated NSR pollutant, the major stationary source shall comply with the requirements under Section 12.2.19.

12.2.1.6 Existing Emission Unit Projects

The provisions of this paragraph apply when a project occurs at an existing emissions unit at a major stationary source, other than a source with a PAL, and the project is not a part of a major modification, and the owner or operator elects to use the method specified in paragraphs (1)(A-D) of the definition of projected actual emissions, found in Section 12.2.2(nn).

- (a) Before beginning actual construction of the project, and as a condition of the source's Authority to Construct Permit, the owner or operator shall document and maintain a record of the following information:
 - (1) A description of the project;

- (2) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
- (3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (1)(C) of the definition of projected actual emissions, as found in Section 12.2.2(nn) and an explanation for why such amount was excluded, and any netting calculations if applicable.
- (b) If the emissions unit is an existing emissions unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in Section 12.2.1.6(a) to the Control Officer. Nothing in this paragraph shall be construed to require the owner or operator of such a unit to obtain any determination from the Control Officer before beginning actual construction.
- (c) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that are emitted by any emissions unit identified in Section 12.2.1.6(a)(2); and calculate and maintain a record of the annual emissions, in tpy, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit that regulated NSR pollutant at any emissions unit.
- (d) If the emissions unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Control Officer within sixty (60) days after the end of each calendar year during which records must be generated under Section 12.2.1.6(c) setting out the unit's annual emissions during the calendar year that preceded submission of the report.
- (e) If the emissions unit is an existing emissions unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Control Officer if the annual emissions, in tpy, from the project identified in Section 12.2.1.6(a) exceed the baseline actual emissions (as documented and maintained pursuant to Section 12.2.1.6(a)(3)) by a significant amount for that regulated NSR pollutant, and if such emissions differ from the projected actual emissions (prior to exclusion of the amount of emissions under the definition of projected actual emissions) as documented and maintained pursuant to Section 12.2.1.6(a)(3). Such report shall be submitted to the Control Officer within sixty (60) days after the end of such year. The report shall contain the following:

- (1) The name, address, and telephone number of the major stationary source;
- (2) The annual emissions, as calculated pursuant to Section 12.2.1.6(c); and
- (3) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

12.2.1.7 Availability of Information

The owner or operator of the source shall make the information required to be documented and maintained pursuant to Section 12.2.1.6 available for review upon a request for inspection by the Control Officer.

12.2.1.8 Secondary Emissions

Secondary emissions shall not be considered in determining whether a stationary source would qualify as a major stationary source. If a stationary source is subject to Section 12.2 on the basis of the direct emissions from the stationary source, the requirements of Section 12.2.10, but no other provisions of Section 12.2, must also be met for secondary emissions.

12.2.2 Definitions

Unless the context otherwise requires, the following terms shall have the meanings set forth below for the purposes of Section 12.2. When a term is not defined in these paragraphs, it shall have the meaning given in Section 0, or the Act, in that order of priority.

- (a) "Actual emissions" means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with this definition.
 - (1) In general, actual emissions as of a particular date shall equal the average rate, in tpy, at which the emissions unit actually emitted the regulated NSR pollutant during a consecutive 24month period which precedes the particular date and which is representative of normal source operation. The Control Officer 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, and types of materials processed, stored, or combusted during the selected time period.

- (2) The Control Officer may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (3) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
- (4) This definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL. Instead, projected actual emissions and baseline actual emissions shall apply for those purposes.
- (b) "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to practicably enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:
 - (1) Any applicable standards set forth in these AQRs and 40 CFR Parts 60, 61 or 63;
 - (2) Any applicable emission limitation in the Nevada SIP, including those with a future compliance date; or
 - (3) The emissions rate specified as a practicably enforceable permit condition, including those with a future compliance date.
- (c) "Baseline actual emissions" means the rate of emissions, in tpy, of a regulated NSR pollutant, as determined in accordance with paragraphs (1) through (4) of this definition.
 - (1) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tpy, at which the unit actually emitted the pollutant during any consecutive 24month period selected by the owner or operator within the 5year period immediately preceding when the owner or operator begins actual construction of the project. The Control Officer shall allow the use of a different time period upon a determination that it is more representative of normal source operation.
 - (A) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
 - (B) The average rate 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.

- (C) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must comply as of the particular date, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. For the purposes of determining baseline actual emissions for contemporaneous changes pursuant to paragraph (ii)(1)(B) of the definition of net emissions increase, the particular date is the date on which the particular change occurred. However, if an emission limitation is part of a Maximum Achievable Control Technology standard that the Administrator proposed or promulgated under 40 CFR Part 63, the baseline actual emissions need only be adjusted if the state of Nevada has taken credit for such emissions reductions in an attainment demonstration or maintenance plan, consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G).
- (D) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.
- (E) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tpy, and for adjusting this amount if required by paragraph (1)(C) of this definition.
- (2) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tpy, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-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 Control Officer for a permit required under these regulations, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.

- (A) The average rate shall include fugitive emissions to the extent quantifiable.
- (B) The average rate shall include emissions associated with startups, shutdowns, and malfunctions.
- (C) The average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.
- (D) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source mustcomply as of the particular date had such major stationary source been required to comply with such limitations during the consecutive 24-month period. For the purposes of determining baseline actual emissions for contemporaneous changes pursuant to paragraph (ii)(1)(B) of the definition of net emissions increase, the particular date is the date on which the particular change occurred. However, if an emission limitation is part of a Maximum Achievable Control Technology standard that the Administrator proposed or promulgated under 40 CFR Part 63, the baseline actual emissions need only be adjusted if the state of Nevada has taken credit for such emissions reductions in an attainment demonstration or maintenance plan, consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G).
- (E) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.
- (F) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tpy, and for adjusting this amount if required by paragraphs (2)(C) and (D) of this definition.
- (3) For a new emissions unit, the baseline actual emissions 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 potential to emit.

- (4) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in paragraph (1) of this definition, for other existing emissions units in accordance with the procedures contained in paragraph (2) of this definition, and for a new emissions unit in accordance with the procedures contained in paragraph (3) of this definition.
- (d) "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under 40 CFR Part 81 and Section 107(d)(1)(A)(ii) or (iii) of the Act in which the major stationary source or major modification establishing the minor source baseline date would construct, or in which it would have an air quality impact for the pollutant for which the baseline date is established, as follows: Equal to or greater than 1 μ g/m³ (annual average) for SO₂, NO₂, or PM₁₀; or equal to or greater than 0.3 μ g/m³ (annual average) for PM_{2.5}.
 - (1) Area redesignations under 40 CFR Part 81 and Section 107(d)(1)(A)(ii) or (iii) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:
 - (A) Establishes a minor source baseline date; or
 - (B) Is subject to Section 12 of the AQRs.
 - (2) Any baseline area established originally for the Total Suspended Particulates (TSP) increments shall remain in effect and shall apply for purposes of determining the amount of available PM₁₀ increments, except that such baseline area shall not remain in effect if the Control Officer rescinds the corresponding minor source baseline date.
- (e) "Baseline concentration" means:
 - (1) That ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established, and shall include:
 - (A) The actual emissions, representative of sources in existence on the applicable minor source baseline date, except as otherwise provided in paragraph (2) of this definition; and
 - (B) 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.

- (2) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):
 - (A) Actual emissions from any major stationary source on which construction commenced after the major source baseline date; and
 - (B) Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.
- (f) "Basic design parameter" means:
 - (1) Except as provided in paragraph (3) of this definition, for a process unit at a steam electric generating facility, the owner or operator may select as its basic design parameters either maximum hourly heat input and maximum hourly fuel consumption rate, or maximum hourly electric output rate and maximum steam flow rate. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on British Thermal Units (Btu) content shall be used for determining the basic design parameter(s) for a coal-fired electric utility steam generating unit.
 - (2) Except as provided in paragraph (3) of this definition, the basic design parameter(s) for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material when selecting a basic design parameter.
 - (3) If the owner or operator believes the basic design parameter(s) in paragraphs (1) and (2) of this definition is not appropriate for a specific industry or type of process unit, the owner or operator may propose to the Control Officer an alternative basic design parameter(s) for the source's process unit(s). If the Control Officer approves of the use of an alternative basic design parameter(s), the Control Officer shall issue a permit that is legally enforceable that records such basic design parameter(s) and requires the owner or operator to comply with such parameter(s).

- (4) The owner or operator shall use credible information, such as results of historic maximum capability tests, design information from the manufacturer, or engineering calculations, in establishing the magnitude of the basic design parameter(s) specified in paragraphs (1) and (2) of this definition.
- (5) If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameter(s) using the maximum value achieved by the process unit in the 5-year period immediately preceding the planned activity.
- (6) Efficiency of a process unit is not a basic design parameter.
- (7) The replacement activity shall not cause the process unit to exceed any emission limitation, or operational limitation that has the effect of constraining emissions, that applies to the process unit and that is legally enforceable.
- (g) "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.
- (h) "Best Available Control Technology (BACT)" means an emission 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 Control Officer, 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 combustion techniques for control of such pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Part 60 or 61. If the Control Officer 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 BACT. Such standard shall, to the degree possible, set

forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation, and shall provide for compliance by means which achieve equivalent results.

- (i) "Building, structure, facility, or installation" means all of the pollutantemitting 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 SIC or NAICS code) as described in either the Standard Industrial Classification manual, 1972, as amended by the 1977 supplement or the North American Industrial Classification System manual.
- (j) "Categorical stationary source" means any stationary source of air pollutants that belongs to one of the following categories:
 - (1) Fossil fuel-fired steam electric plants of more than 250 million Btu per hour heat input;
 - (2) Coal cleaning plants (with thermal dryers);
 - (3) Kraft pulp mills;
 - (4) Portland cement plants;
 - (5) Primary zinc smelters;
 - (6) Iron and steel mills;
 - (7) Primary aluminum ore reduction plants;
 - (8) Primary copper smelters;
 - (9) Municipal incinerators capable of charging more than 50 tons of refuse per day;
 - (10) Hydrofluoric, sulfuric, or nitric acid plants;
 - (11) Petroleum refineries;
 - (12) Lime plants;
 - (13) Phosphate rock processing plants;
 - (14) Coke oven batteries;
 - (15) Sulfur recovery plants;

- (16) Carbon black plants (furnace process);
- (17) Primary lead smelters;
- (18) Fuel conversion plants;
- (19) Sintering plants;
- (20) Secondary metal production plants;
- (21) Chemical process plants;
- (22) Fossil-fuel boilers (or combination thereof) totaling more than 250 million Btu per hour heat input;
- (23) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (24) Taconite ore processing plants;
- (25) Glass fiber processing plants; and
- (26) Charcoal production plants.
- (k) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or postcombustion stage at a new or existing facility, which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen (NO_x) associated with the utilization of coal in the generation of electricity or process steam which was not in widespread use as of November 15, 1990.
- (I) "Clean Coal Technology Demonstration Project" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of \$2.5 billion for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the EPA. The federal contribution for a qualifying project shall be at least twenty (20) percent of the total cost of the demonstration project.
- (m) "Commence," as applied to construction of a major stationary source or major modification, means that the owner or operator has all necessary preconstruction approvals or permits, including an Authority to Construct Permit, and either has:
 - Begun, or caused to begin, a continuous program of actual onsite construction of the source, to be completed within a reasonable time; or

- (2) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- (n) "Complete" means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the Control Officer from requesting or accepting any additional information.
- (o) "Construction" means any physical change, or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emissions unit, that would result in a change in emissions.
- (p) "Continuous Emissions Monitoring System (CEMS)" means all of the equipment that may be required to meet the data acquisition and availability requirements of Section 12.2 to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.
- (q) "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).
- (r) "Continuous Parameter Monitoring System (CPMS)" means all of the equipment necessary to meet the data acquisition and availability requirements of Section 12.2, to monitor process and control device operational parameters and other information, and to record average operational parameter value(s) on a continuous basis.
- (s) "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.
- (t) "Emissions unit" means any part of a stationary source that emits, or would have the potential to emit, any regulated NSR pollutant and includes an electric utility steam generating unit. For purposes of Section 12.2, there are two types of emissions units, as described in paragraphs (1) and (2) of this definition:

- (1) A "new emissions unit" is any emissions unit which is (or will be) newly constructed and which has existed for less than two (2) years from the date such emissions unit first operated. For the purposes of this definition, the date an emissions unit first operated shall not be extended by any shakedown period established pursuant to paragraph (ii)(6) of Section 12.2.2.
- (2) An "existing emissions unit" is any emissions unit that does not meet the requirements in paragraph (1) of this definition. A replacement unit is an existing emissions unit.
- (u) "Federally Enforceable" means all limitations and conditions which are enforceable by the Administrator.
- (v) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the Department with authority over such lands.
- (w) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- (x) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.
- (y) "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 the power of self-government.
- (z) "Indian reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of Congress.
- (aa) "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.
- (bb) "Lowest Achievable Emission Rate (LAER)" means, for any source, the more stringent rate of emissions based on the following:
 - (1) The most stringent emission limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed major stationary source demonstrates that such limitations are not achievable; or

(2) The most stringent emission limitation which is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the LAER for the new or modified emissions units within the stationary source. In no event shall the application of the 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.

For purposes of this definition only, the term "any state" means a state, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa, and includes the Commonwealth of the Northern Mariana Islands.

- (cc) "Low terrain" means any area other than high terrain.
- (dd) "Major modification" means any physical change in, or change in the method of operation of, a major stationary source that would result in a significant emissions increase of a regulated NSR pollutant and a significant net emissions increase of that pollutant from the major stationary source.
 - (1) Any significant emissions increase from any emissions units or net emissions increase at a major stationary source that is significant for volatile organic compounds or nitrogen oxides shall be considered significant for ozone.
 - (2) A physical change or change in the method of operation shall not include:
 - (A) Routine maintenance, repair, and replacement;
 - (B) Use of an alternative fuel or raw material by reason of an order under 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;
 - Use of an alternative fuel by reason of an order or rule under Section 125 of the Act;
 - Use of an alternative fuel at a steam generating unit, to the extent that the fuel is generated from municipal solid waste;
 - (E) Use of an alternative fuel or raw material by a stationary source which:

- (i) The source was capable of accommodating before January 6, 1975, unless such change is prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to Section 12 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, or
- (ii) The source is approved to use under any permit issued under Section 12 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, or 40 CFR 52.21.
- (F) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to Subpart I of 40 CFR Part 51.
- (G) Any change in ownership at a stationary source;
- (H) The installation, operation, cessation, or removal of a Temporary Clean Coal Technology Demonstration Project, provided that the project complies with:
 - (i) The Nevada SIP; and
 - (ii) Other requirements necessary to attain and maintain the National Ambient Air Quality Standards during the project and after it is terminated.
- (I) 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; or
- (J) The reactivation of a very clean coal-fired electric utility steam generating unit.
- (3) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under Section 12.2.19 for a PAL for that regulated NSR pollutant. Instead, the definition of PAL major modification shall apply.
- (4) The fugitive emissions of a major stationary source shall be included in determining, for any of the purposes of Section 12.2,

whether a particular physical change or change in the method of operation is a major modification.

- (ee) "Major source baseline date" means:
 - (1) In the case of PM_{10} and sulfur dioxide, January 6, 1975;
 - (2) In the case of nitrogen dioxide, February 8, 1988; and
 - (3) In the case of $PM_{2.5}$, October 20, 2010.
- (ff) "Major stationary source"
 - (1) Means:
 - (A) Any of the categorical stationary sources of air pollutants which emits, or has the potential to emit, 100 tpy or more of any regulated NSR pollutant;
 - (B) Notwithstanding the stationary source size otherwise specified in paragraph (1)(A) of this definition, any noncategorical stationary source which emits, or has the potential to emit, 250 tpy or more of a regulated NSR pollutant; or
 - (C) Any stationary source specified in paragraphs (1)(A) or (1)(B) of this definition which emits, or has the potential to emit, greenhouse gases ("GHGs") that are subject to regulation as defined in 40 CFR § 52.21(b)(49) as of July 19, 2011; or
 - (D) Any physical change that would occur at a stationary source not qualifying under paragraphs (1)(A) or (1)(B) of this definition as a major stationary source, if the change would constitute a major stationary source by itself.
 - (2) A major stationary source that is major for volatile organic compounds or nitrogen oxides shall be considered major for ozone.
 - (3) The fugitive emissions of a stationary source shall not be included in determining, for any of the purposes of Section 12.2, whether it is a major stationary source, unless the source is a categorical stationary source or belongs to any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Act.
- (gg) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification sub-

ject to Section 12 of the AQRs submits a complete application under the relevant regulations.

- (1) The trigger date is:
 - (A) In the case of particulate matter and sulfur dioxide, August 7, 1977;
 - (B) In the case of nitrogen dioxide, February 8, 1988; and
 - (C) In the case of $PM_{2.5}$, October 20, 2011.
- (2) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
 - (A) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under 40 CFR Part 81 and Section 107(d)(1)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under Section 12.2 of the AQRs; and
 - (B) 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.
- (3) Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM₁₀ increments, except that the Control Officer shall rescind a minor source baseline date where it can be shown, to the satisfaction of the Control Officer, that the emissions increase from the major stationary source, or net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM₁₀ emissions.
- (hh) "Necessary preconstruction approvals or permits" means those permits or approvals required under air quality control laws and regulations which are part of the Nevada SIP, these regulations, or federal air quality control laws and regulations, including the Authority to Construct Permits issued pursuant to Section 12.4.
- (ii) "Net emissions increase (NEI)" means, with respect to any regulated NSR pollutant emitted by a major stationary source, the following:
 - (1) The amount by which the sum of the following exceeds zero:

- (A) The increase in emissions from a particular physical change, or change in the method of operation, at a stationary source as calculated pursuant to Sections 12.2.1.4(a) through (e); and
- (B) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable.
- (C) For the purposes of calculating increases and decreases under paragraph (1)(B) of this definition, baseline actual emissions shall be determined as provided in the definition of baseline actual emissions, except that paragraphs (1)(C) and (2)(E) of that definition shall not apply.
- (2) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the date five (5) years before construction on the particular change commences and the date that the increase from the particular change occurs.
- (3) An increase or decrease in actual emissions is creditable only if the Control Officer has not relied on it in issuing a permit for the source under Section 12 or any other regulation approved by the Administrator pursuant to 40 CFR Part 51, which permit is in effect when the increase in actual emissions from the particular change occurs.
- (4) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (5) A decrease in actual emissions is creditable only to the extent that:
 - (A) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
 - (B) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;
 - (C) The Control Officer has not relied on it in issuing any permit under Section 12, or any other regulations approved pursuant to 40 CFR Part 51, Subpart I, nor has the state of Nevada relied on it in demonstrating attainment or reasonable further progress; and

- (D) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (6) 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, or any new emissions unit that replaces an existing emissions unit and that requires shakedown, becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty (180) days.
- (jj) "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 types or amounts of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is enforceable as a practical matter. Secondary emissions do not count in determining the potential to emit of a stationary source.
- (kk) "Predictive Emissions Monitoring System (PEMS)" means all of the equipment necessary to monitor process and control device operational parameters and other information, and calculate and record the mass emissions rate on a continuous basis.
- (II) "Prevention of Significant Deterioration (PSD) Permit" means any permit that is issued under a major source preconstruction permit program that has been approved by the Administrator and incorporated into the Nevada SIP to implement the requirements of Part C, Subchapter I of the Act. Any permit issued under such a program is a major NSR permit.
- (mm) "Project" means a physical change in, or change in the method of operation of, an existing stationary source.
- (nn) "Projected actual emissions" means the maximum annual rate, in tpy, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the five (5) years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the ten (10) years following that date if (1) the project involves increasing the design capacity or potential to emit of any emissions unit for that regulated NSR pollutant, and (2) full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.

- (1) In determining the projected actual emissions (before beginning actual construction), the owner or operator of the major stationary source:
 - (A) Shall consider all relevant information, including, but not limited to historical operational data, the company's own representations, the company's expected business activity and highest projections of business activity, the company's filings with the county, state, or federal regulatory authorities, and compliance plans under these regulations;
 - (B) Shall include fugitive emissions to the extent quantifiable;
 - (C) Shall include emissions associated with startups, shutdowns, and malfunctions; and
 - (D) Shall exclude, only for 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 consecutive 24month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth.
 - (E) In lieu of using the method set out in paragraphs (1)(A)-(D) of this definition, the owner or operator of the major stationary source may elect to use the emissions unit's potential to emit, in tpy.
- (oo) "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change, or change in the method of operation, associated with commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:
 - (1) Has not been in operation for the 2-year period prior to the enactment of the Act Amendments of 1990, and the emissions from such unit continue to be carried in the Clark County emissions inventory at the time of enactment;
 - (2) Was equipped prior to shutdown with a continuous system of emissions control that achieved a removal efficiency for sulfur dioxide of no less than eighty-five (85) percent and a removal efficiency for particulates of no less than ninety-eight (98) percent;
 - (3) Is equipped with low-NOx burners prior to the time of commencing operations following reactivation; and

- (4) Is otherwise in compliance with the requirements of these regulations.
- (pp) "Regulated NSR pollutant," for purposes of Section 12.2, means the following:
 - (1) Any pollutant for which a National Ambient Air Quality Standard has been promulgated. This includes, but is not limited to, the following:
 - (A) PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ in PSD permits. Compliance with emissions limitations for PM_{2.5} and PM₁₀ issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this section unless the applicable implementation plan required condensable particulate matter to be included;
 - (B) Any pollutant identified as a constituent or precursor to a pollutant for which a National Ambient Air Quality Standard has been promulgated. The Administrator has identified the following precursors for the purposes of NSR:
 - (i) Volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment and unclassifiable areas.
 - (ii) Sulfur dioxide is a precursor to PM_{2.5} in all attainment and unclassifiable areas.
 - (iii) Nitrogen oxides are presumed to be precursors to PM_{2.5} in all attainment and unclassifiable areas unless the state or county demonstrates to the Administrator's satisfaction, or EPA demonstrates, that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient PM_{2.5} concentrations.
 - (iv) Volatile organic compounds are presumed not to be precursors to PM_{2.5} in any attainment or unclassifia-

ble area unless the state or county demonstrates to the Administrator's satisfaction, or EPA demonstrates, that emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient $PM_{2.5}$ concentrations.

- (2) Any pollutant that is subject to any standard promulgated under Section 111 of the Act;
- (3) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act; or
- (4) Except as provided in Section 12.2.2(pp)(5),any pollutant that otherwise is subject to regulation under the Act as defined in 40 CFR § 52.21(b)(49) as of July 19, 2011,
- (5) The term "Regulated NSR Pollutant" shall not include 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 and not delisted pursuant to Section 112(b)(3) of the Act, unless the listed HAP is also regulated as a constituent or precursor of a general pollutant listed under Section 108 of the Act.
- (qq) "Replacement unit" means an emissions unit for which all the criteria listed in paragraphs (1) through (4) of this definition are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced. The criteria are:
 - (1) The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
 - (2) The emissions unit is identical to, or functionally equivalent to, the replaced emissions unit.
 - (3) The replacement does not alter the basic design parameters of the process unit.
 - (4) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.
- (rr) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressur-

ized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells or—as determined by the Administrator, in consultation with the Secretary of Energy—a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

- (1) Repowering shall also include any oil and/or gas-fired unit which has been awarded Clean Coal Technology Demonstration Project funding as of January 1, 1991, by the U.S. Department of Energy.
- (2) The Control Officer shall give expedited consideration to permit applications for any source that satisfies the requirements of Section 12.2.2(rr) and is granted an extension under Section 409 of the Act.
- (ss) "Secondary emissions" means emissions which would 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. For the purpose of Section 12.2, 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 off-site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.
- (tt) "Shutdown" means the cessation of operation of any air pollution control equipment or process equipment for any purpose, except routine phasing out of process equipment.
- (uu) "Significant" means:
 - (1) In reference to a net emissions increase or a source's potential to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:
 - Carbon monoxide: 100 tpy;
 - NO_x: 40 tpy;

- Sulfur dioxide: 40 tpy;
- Particulate matter: 25 tpy;
- PM₁₀: 15 tpy;
- PM_{2.5}: 10 tpy of direct PM_{2.5} emissions or 40 tpy of sulfur dioxide emissions or 40 tpy of nitrogen oxide emissions;
- 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 tetrara- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans): 3.2 x 10⁻⁶ megagrams per year (3.5 x 10⁻⁶ tpy).
- Municipal waste combustor metals (measured as Particulate Matter): 14 megagrams per year (15 tpy);
- Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tpy);
- Municipal solid waste landfills emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tpy); and
- Ozone-depleting substances: 100 tpy.
- GHG: The sum of the six well-mixed GHGs on a mass basis greater than 0 tpy and the sum of the six well-mixed GHGs equal to or greater than 75,000 tpy CO2e as defined in 40 CFR § 52.21(b)(49) as of July19, 2011.
- (2) "Significant" means, in reference to a net emissions increase or a source's potential to emit a regulated NSR pollutant that is not listed in this definition, any emissions rate.
- (3) Notwithstanding the pollutant-specific significance levels specified in this definition "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10

kilometers of a Class I area and have an impact on such area equal to or greater than 1 microgram per cubic meter (24-hour average).

- (vv) "Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant for that pollutant.
- (ww) "Startup" means the setting into operation of any air pollution control equipment or process equipment for any purpose except the routine phasing in of process equipment.
- (xx) "Stationary source" means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.
- (yy) "Temporary Clean Coal Technology Demonstration Project" means a Clean Coal Technology Demonstration Project that is operated for a period of five (5) years or less, and which complies with the requirements of these regulations and other requirements necessary to attain and maintain the National Ambient Air Quality Standards during the project and after it is terminated.

12.2.3 Ambient Air Increments

In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increases (µg/m³)	
	Class I	
	PM _{2.5} , annual arithmetic mean	1
Particulate Matter	PM _{2.5} , 24-hr maximum	2
	PM ₁₀ , annual arithmetic mean	4
	PM ₁₀ , 24-hr maximum	8
	Annual arithmetic mean	2
Sulfur Dioxide	24-hr maximum	5
	3-hr maximum	25
Nitrogen Dioxide Annual arithmetic mean		2.5
	Class II	
	PM _{2.5} , annual arithmetic mean	4
Derticulate Matter	PM _{2.5} , 24-hr maximum	9
	PM ₁₀ , annual arithmetic mean	17
	PM ₁₀ , 24-hr maximum	30
Sulfur Dioxide	Annual arithmetic mean	20

Table 12.2-1. Increment Limits

Pollutant	Maximum allowable increases (µg/m³)	
	24-hr maximum	91
	3-hr maximum	512
Nitrogen Dioxide	Annual arithmetic mean	25
	Class III	
	PM _{2.5} , annual arithmetic mean	8
Dortioulate Matter	PM _{2.5} , 24-hr maximum	18
	PM ₁₀ , annual arithmetic mean	34
	PM ₁₀ , 24-hr maximum	60
	Annual arithmetic mean	40
Sulfur Dioxide	24-hr maximum	182
	3-hr maximum	700
Nitrogen Dioxide	Annual arithmetic mean	50

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

12.2.4 Ambient Air Ceilings

No concentration of a pollutant shall exceed the concentration permitted under the secondary National Ambient Air Quality Standard or the primary National Ambient Air Quality Standard, whichever is lowest for the pollutant, for a period of exposure.

12.2.5 Restrictions On Area Classifications

12.2.5.1 Class I Areas

All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

- (a) International parks,
- (b) National wilderness areas which exceed 5,000 acres in size,
- (c) National memorial parks which exceed 5,000 acres in size, and
- (d) National parks which exceed 6,000 acres in size.

12.2.5.2 Redesignation of Class I Areas

Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in 40 CFR Part 51.

12.2.5.3 Class II Areas

Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in 40 CFR Part 51.

12.2.5.4 Redesignating Areas

The following areas may be redesignated only as Class I or II:

- (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
- (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

12.2.5.5 Exclusions from Increment Consumption

- (a) The following concentrations shall be excluded in determining compliance with a maximum allowable increase:
 - (1) 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;
 - (2) 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;
 - (3) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emissionrelated activities of new or modified sources;
 - (4) 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; and

- (5) Concentrations attributable to the temporary increase in emissions of sulfur dioxide, particulate matter, or nitrogen oxides from stationary sources which are affected by plan revisions approved by the Administrator as meeting the criteria specified in paragraph (a)(3) of Section 12.2.5.5.
- (b) If the plan provides that the concentrations to which paragraphs (a)(1) or (a)(2) of Section 12.2.5.5 refers shall be excluded, it shall also provide that no exclusion of such concentrations shall apply more than five (5) years after the effective date of the order to which paragraph (a)(1) of Section 12.2.5.5 refers or the plan to which paragraph (a)(2) of Section 12.2.5.5, refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall apply more than five (5) years after the later of such effective dates.
- (c) For purposes of excluding concentrations pursuant to paragraph (a)(5) of Section 12.2.5.5, the Administrator may approve a plan revision that:
 - (1) Specifies the time over which the temporary emissions increase of sulfur dioxide, particulate matter, or nitrogen oxides would occur. Such time is not to exceed two (2) years in duration unless a longer time is approved by the Administrator.
 - (2) Specifies that the time period for excluding certain contributions in accordance with paragraph (c)(1) of Section 12.2.5.5, is not renewable;
 - (3) Allows no emissions increase from a stationary source which would:
 - (A) Impact a Class I area or an area where an applicable increment is known to be violated; or
 - (B) Cause or contribute to the violation of a National Ambient Air Quality Standard.
 - (4) Requires limitations to be in effect the end of the time period specified in accordance with paragraph (c)(1) of Section 12.2.5.5, which would ensure that the emissions levels from stationary sources affected by the plan revision would not exceed those levels occurring from such sources before the plan revision was approved.

12.2.6 Redesignation

12.2.6.1 Clark County

All areas of Clark County (except as otherwise provided under Section 12.2.5) are designated Class II as of December 5, 1974. Redesignation of any area of the county (except as otherwise precluded by Section 12.2.5) may be proposed by the Control Officer, as provided below and subject to approval by the Administrator, as a revision to the Nevada SIP.

12.2.6.2 Requirements

- (a) Clark County, through the state of Nevada, may submit to the Administrator a proposal to redesignate areas of the county Class I or Class II provided that:
 - (1) At least one public hearing has been held in accordance with the procedures established in Section 12.2.16;
 - (2) Other states, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least thirty (30) days prior to the public hearing;
 - (3) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least thirty (30) days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;
 - (4) Prior to the issuance of notice respecting the redesignation of an area that includes any federal lands, the county, through the state of Nevada, has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of sixty (60) days) to confer with the county respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the county shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and
 - (5) The county, through the state of Nevada, has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

- (b) Any area other than an area to which Section 12.2.5 refers may be redesignated as Class III if:
 - (1) The redesignation would meet the requirements of Section 12.2.6.2;
 - (2) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the county and the governor, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless state law provides that the redesignation must be specifically approved by state legislation), and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;
 - (3) The redesignation would not cause or contribute to a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any National Ambient Air Quality Standard; and
 - (4) Any permit application for any major stationary source or major modification, subject to review under Section 12.2.11, which could receive a permit under Section 12.2 only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

12.2.6.3 Reserved

12.2.6.4 Administrator Approval

The Administrator will disapprove, within ninety (90) days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of Section 12.2.6 or is inconsistent with Section 12.2.5. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

12.2.6.5 Resubmitting Disapproved Proposal

If the Administrator disapproves any proposed redesignation, the county may resubmit the proposal after correcting the deficiencies noted by the Administrator.

12.2.7 Stack Heights

12.2.7.1 Emission Limitation

The degree of emission limitation required for control of any air pollutant under Section 12.2 shall not be affected in any manner by:

- (a) So much of the stack height of any source as exceeds good engineering practice; or
- (b) Any other dispersion technique.

12.2.7.2 Time Frame

Section 12.2.7.1 shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

12.2.7.3 Stack Height Limitation

- (a) The limitations set forth herein shall not apply to stacks or dispersion techniques used by the owner or operator prior to December 31, 1970, for which the owner or operator had:
 - (1) Begun, or caused to begin, a continuous program of physical on-site construction of the stack;
 - (2) Entered into building agreements or contractual obligations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack, to be completed in a reasonable time; or
 - (3) Coal-fired steam electric generating units, subject to the provisions of Section 118 of the Act, which commenced operation before July 1, 1975, with stacks constructed under a construction contract awarded before February 8, 1974.
- (b) Good engineering practice stack height is calculated as the greater of the four numbers in paragraphs (b)(1) through (b)(4) of Section 12.2.7.3:
 - (1) 213.25 feet (65 meters);
 - (2) For stacks in existence on January 12, 1979, and for which the owner or operator had obtained all applicable preconstruction permits or approvals required under 40 CFR Part 51 or 52, Hg = 2.5H;
 - (3) For all other stacks, Hg = H + 1.5L, where:

- Hg = Good engineering practice stack height, measured from the ground-level elevation at the base of the stack;
- H = Height of nearby structure, measured from the groundlevel elevation at the base of the stack;
- L = Lesser dimension (height or projected width) of nearby structure;

provided that the EPA, the Control Officer, or a local control agency may require the use of a field study or fluid model to verify good engineering practice (GEP) stack height for the source; or

- (4) The height demonstrated by a fluid model or a field study approved by the reviewing agency, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures, or nearby terrain obstacles.
- (5) For a specific structure or terrain feature, "nearby" shall be:
 - (A) For purposes of applying the formulae in paragraphs (b)(2) and (b)(3) of Section 12.2.7.3, that distance up to five (5) times the lesser of the height or the width dimension of a structure, but not greater than 0.8 km (1/2 mile);
 - (B) For conducting demonstrations under paragraph (b)(4) of Section 12.2.7.3, not greater than 0.8 km (1/2 mile). An exception is that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to ten (10) times the maximum height (H+) of the feature, not to exceed two (2) miles if such feature achieved a height (H+) 0.8 km from the stack. The height shall be at least forty (40) percent of the GEP stack height as determined by the formula provided in paragraph (b)(3) of Section 12.2.7.3 or 85 feet (26 meters), whichever is greater, as measured from the ground-level elevation at the base of the stack.
- (6) "Excessive concentrations" means, for the purpose of determining GEP stack height under paragraph (b)(4) of Section 12.2.7.3:
 - (A) For sources seeking credit for stack height exceeding that established under paragraphs (b)(2) and (b)(3) of Section 12.2.7.3, a maximum ground-level concentration due to emissions from a stack due in whole or in part to down-

wash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least forty (40) percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects, and which contributes to a total concentration due to emissions from all sources that is greater than a National Ambient Air Quality Standard. For sources subject to the requirements for permits or permit revisions under Section 12.2.7.3, an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least forty (40) percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects, and greater than the applicable maximum allowable increase contained in Section 12.2.3. The allowable emissions rate to be used in making demonstrations under paragraph (b)(4) of Section 12.2.7.3 shall be prescribed by the new source performance standard which is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the Control Officer, an alternative emission rate shall be established in consultation with the source owner or operator;

- (B) For sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established under paragraphs (b)(2) and (b)(3) of Section 12.2.7.3, either:
 - A maximum ground-level concentration due in whole or in part to downwash, wakes, or eddy effects as provided in paragraph (b)(4) of Section 12.2.7.3, except that the emission rate specified by any applicable SIP shall be used; or
 - (ii) The actual presence of a local nuisance caused by the existing stack, as determined by the Control Officer.
- (C) For sources seeking credit after January 12, 1979, for a stack height determined under paragraphs (b)(2) and (b)(3) of Section 12.2.7.3, where the Control Officer requires the use of a field study or fluid model to verify GEP stack height; for sources seeking stack height credit after No-

vember 9, 1984, based on the aerodynamic influence of cooling towers; and for sources seeking stack height credit after December 31, 1970, based on the aerodynamic influence of structures not adequately represented by the equations in paragraphs (b)(2) and (b)(3) of Section 12.2.7.3, a maximum ground-level concentration due in whole or in part to downwash, wakes, or eddy effects that is at least forty (40) percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

- (c) The degree of emission limitation required of any source after the respective date given in paragraph (a) of Section 12.2.7.3 for control of any pollutant shall not be affected by so much of any source's stack height that exceeds good engineering practice, or by any other dispersion technique.
- (d) Before the Control Officer issues an Authority to Construct Permit or permit revision under Section 12.2 to a source based on a good engineering practice stack height that exceeds the height allowed by paragraph (b) of Section 12.2.7.3, the Control Officer shall notify the public of the availability of the demonstration study and provide the opportunity for a public hearing in accordance with the requirements of Section 12.2.16.

12.2.8 Exemptions

The requirements of Sections 12.2.9 through 12.2.17 shall not apply to a particular major stationary source or major modification if:

- (a) The major stationary source or major modification would be a nonprofit health or nonprofit educational institution, or the major modification would occur at such an institution; or
- (b) The source is a portable stationary source which has previously received a permit, and:
 - The owner or operator proposes to relocate the major stationary source, and emissions of the major stationary source at the new location would be temporary;
 - (2) The emissions from the major stationary source would not exceed its allowable emissions;
 - (3) The emissions from the major stationary source would impact no Class I area and no area where an applicable increment is known to be violated; and

(4) Reasonable notice is given to the Control Officer prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the Control Officer not less than ten (10) days in advance of the proposed relocation unless a different time duration is previously approved by the Control Officer.

12.2.8.1 Nonattainment Areas

The requirements of Sections 12.2.9 through 12.2.17 shall 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 major stationary source or major modification is located in an area designated as nonattainment under 40 CFR 81.329.

12.2.8.2 Class I Areas

The requirements of Sections 12.2.10, 12.2.12, and 12.2.14 shall not apply to a major stationary source or major modification with respect to a particular pollutant if the allowable emissions of that pollutant from the major stationary source or the net emissions increase of that pollutant from the major modification:

- (a) Would impact no Class I area and no area where an applicable increment is known to be violated; and
- (b) Would be temporary.

12.2.8.3 Class II Areas

The requirements of Sections 12.2.10, 12.2.12, and 12.2.14 as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a 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 fifty (50) tpy.

12.2.8.4 Threshold Limits

The Control Officer may exempt a major stationary source or major modification from the requirements of Section 12.2.12, with respect to monitoring for a particular pollutant, if:

(a) The emissions increase of the pollutant from the new source, or the net emissions increase of the pollutant from the modification, would

cause, in any area, air quality impacts less than the following amounts.

Pollutant	Emissions Increase (µg/m ³)
Carbon monoxide, 8-hour average	575
Nitrogen dioxide, annual average	14
PM _{2.5} ,	0 (in accordance with Sierra Club vs EPA, 706 F.3d 428 D.C. Circuit 2013, no exemption is available with regard to $PM_{2.5}$)
PM ₁₀ , 24-hour average	10
Sulfur dioxide, 24-hour average	13
Ozone	No <i>de minimis</i> air quality level is provided for ozone. Howev- er, any net increase of 100 tpy or more of VOCs or NO _x sub- ject to PSD would require an ambient impact analysis, in- cluding the gathering of ambient air quality data.
Lead, 3-month average	0.1
Fluorides, 24-hour average	0.25
Total reduced sulfur, 1-hour average	10
Hydrogen sulfide, 1-hour average	0.2
Reduced sulfur compounds, 1-hour average	10

Table 12.2-2. Air Quality Impact Limits

- (b) The concentrations of the pollutant in the area that the major stationary source or major modification would affect are less than the concentrations listed in paragraph (a) of Section 12.2.8.4; or
- (c) The pollutant is not listed in paragraph (a) of Section 12.2.8.4.

12.2.9 Control Technology Review

A major stationary source or major modification shall meet each applicable requirement.

12.2.9.1 Major Stationary Sources

A new major stationary source shall apply BACT for each regulated NSR pollutant that it would have the potential to emit in significant amounts.

12.2.9.2 Major Modifications

A major modification shall apply BACT for each regulated NSR pollutant for which it would result in a significant net emissions increase at the stationary 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 emissions unit.

12.2.9.3 Phased Construction Projects

For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than eighteen (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.

12.2.10 Source Impact Analysis

12.2.10.1 Demonstration of Impact

The owner or operator of the proposed major stationary source or major modification shall demonstrate that allowable emissions 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:

- (a) Any NAAQS in any air quality control region; or
- (b) Any applicable maximum allowable increase over the baseline concentration in any area.

12.2.10.2 Violation of Standard

A major stationary source or major modification will be considered to cause or contribute to a violation of a National Ambient Air Quality Standard when such source or modification would, at a minimum, exceed the significance levels listed in Table 12.2-3 at any locality that does not (or would not) meet the applicable national standard.

Pollutant Annual		Significance Levels Averaging time (hours)				
		24	8	3	1	
SO ₂	1.0 µg/m ³	5 µg/m³		25 µg/m³		
PM ₁₀	1.0 µg/m ³	5 µg/m³				
NO ₂	1.0 µg/m ³					
СО			0.5 mg/m ³		2 mg/m ³	

Table 12.2-3.	Significance	Levels
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12.2.11 Air Quality Models

12.2.11.1 Model Applicability

All estimates of ambient concentrations required under Section 12.2 shall be based on applicable air quality models, databases, and other requirements specified in 40 CFR Part 51, Appendix W ("Guideline on Air Quality Models").

12.2.11.2 Model Modifications and Substitutions

Where an air quality model specified in 40 CFR Part 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. 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 developed in accordance with Section 12.2.16.

12.2.12 Air Quality Analysis

12.2.12.1 Preapplication Analysis

- (a) Any application for an Authority to Construct Permit under Section 12.2 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 :
 - (1) For the source, each pollutant that it would have the potential to emit in a significant amount; or
 - (2) For the modification, each pollutant for which it would result in a significant net emissions increase.
- (b) With respect to any such pollutant for which no National Ambient Air Quality Standard exists, the analysis shall contain such air quality monitoring data as the Control Officer determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.
- (c) With respect to any such 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.
- (d) In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one (1) year and shall represent at least the year preceding receipt of the application; except that, if the Control Officer determines that a complete and adequate analysis can be accomplished with monitoring data gathered

over a period shorter than one (1) year (but not to be less than four (4) months), the data that is required shall have been gathered over at least that shorter period.

- (e) The owner or operator of a proposed new stationary source or modification of an existing stationary source of volatile organic compounds who satisfies all conditions of 40 CFR Part 51, Appendix S, Section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under Section 12.2.12.1.
- (f) With respect to any requirements for air quality monitoring of PM₁₀, the owner or operator of the major stationary source or major modification shall use a monitoring method approved by the Administrator and shall estimate the ambient concentrations of PM₁₀ using the data collected by such approved monitoring method in accordance with estimating procedures approved by the Control Officer.

12.2.12.2 Post-Construction Monitoring

The owner or operator of a major stationary source or major modification shall, after construction of the major stationary source or major modification, conduct such ambient monitoring as the Control Officer determines is necessary to determine the effect emissions from the major stationary source or major modification may have, or are having, on air quality in any area.

12.2.12.3 Operations of Monitoring Stations

The owner or operator of a major stationary source or major modification shall meet the requirements of 40 CFR Part 58, Appendix B during the operation of monitoring stations for purposes of satisfying Section 12.2.12.

12.2.13 Source Information

The owner or operator of a proposed major stationary source or major modification shall submit all information necessary to perform any analysis or make any determination required under Section 12.2.13.

12.2.13.1 Required Information

With respect to a major stationary source or major modification to which Sections 12.2.9, 12.2.11, 12.2.13, and 12.2.15 apply, such information shall include:

(a) A description of the nature, location, design capacity, and typical operating schedule of the major stationary source or major modification, including specifications and drawings showing its design and plant layout;

- (b) A detailed schedule for construction of the major stationary source or major modification;
- (c) A detailed description as to what system of continuous emission reduction is planned for the major stationary source or major modification, emission estimates, and any other information necessary to determine that BACT would be applied.

12.2.13.2 Information on Air Quality Impacts

Upon request of the Control Officer, the owner or operator shall also provide information on:

- (a) The air quality impact of the major stationary source or major modification, including meteorological and topographical data necessary to estimate such impact; and
- (b) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since the major source baseline date in the area the major stationary source or major modification would affect.

12.2.14 Additional Impact Analyses

12.2.14.1 Visibility, Soils, and Vegetation

The owner or operator shall provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the proposed major stationary source or major modification, and general commercial, residential, industrial and other growth associated with the major stationary 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.

12.2.14.2 Commercial, Residential, Industrial, and Other Growth

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 modification.

12.2.15 Additional Requirements for Sources Impacting Class I Areas

12.2.15.1 Notice to EPA

The Control Officer shall transmit to the Administrator a copy of each permit application relating to a major stationary source or major modification, and provide notice to the Administrator of every action related to the consideration of such permit.

12.2.15.2 Federal Land Manager

The Federal Land Manager and the federal official charged with direct responsibility for management of Class I lands have an affirmative responsibility to protect the air quality-related values (including visibility) of any such lands and to consider, in consultation with the Administrator, whether a proposed source or modification would have an adverse impact on such values. The Control Officer shall consult with the Federal Land Manager on a proposed major stationary source or major modification that may impact visibility in any Class I Area, in accordance with 40 CFR 51.307.

12.2.15.3 Impact of Denial on Air Quality-Related Values

A Federal Land Manager of any Class I lands may present to the county, after the Control Officer's preliminary determination (required under procedures developed in accordance with Section 12.2.16), a demonstration that the emissions from the proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of any federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the county, through the state of Nevada, concurs with such demonstration, the Control Officer shall not issue the permit.

12.2.15.4 Class I Variances

The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source would have no adverse impact on the air quality-related values of such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and so certifies to the state of Nevada, the Control Officer may, provided that applicable requirements are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide and particulate matter would not exceed the following maximum allowable increases over baseline concentration for such pollutants.

Pollutant	Maximum allowable increase (µg/m³)
Particulate Matter:	
PM _{2.5} , annual arithmetic mean	4
PM _{2.5} , 24-hr maximum	9
PM ₁₀ , annual arithmetic mean	17
PM ₁₀ , 24-hour maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hour maximum	91
3-hr maximum	325
Nitrogen dioxide:	
Annual arithmetic mean	25

Table 12.2-4. Maximum Allowable Pollutant Increases

12.2.15.5 Sulfur Dioxide Variance by Governor with Federal Land Manager's Concurrence

- (a) The owner or operator of a proposed source or modification which cannot be approved under procedures developed pursuant to Section 12.2.16 may demonstrate to the governor, through the Control Officer, that the source or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of twenty-four (24) hours or less applicable to any Class I area and, in the case of federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility).
- (b) The Control Officer, through the governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may grant, after notice and an opportunity for a public hearing, a variance from such maximum allowable increase.
- (c) If such variance is granted, the Control Officer may issue a permit to such source or modification in accordance with provisions developed pursuant to Section 12.2.16, provided that the applicable requirements of the Nevada SIP are otherwise met.

12.2.15.6 Variance by the Governor with the President's Concurrence

(a) The recommendations of the Control Officer, through the governor, and the Federal Land Manager shall be transferred to the president

in any case where the governor recommends a variance in which the Federal Land Manager does not concur.

- (b) The president may approve the governor's recommendation if he finds that such variance is in the national interest.
- (c) If such a variance is approved, the Control Officer may issue a permit in accordance with provisions developed pursuant to the requirements of Section 12.2.16, provided that the applicable requirements of the Nevada SIP are otherwise met.

12.2.15.7 Emission Limitations for Presidential or Gubernatorial Variance

In the case of a permit issued under procedures developed pursuant to Section 12.2.16, the source or modification shall comply with emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the maximum allowable increases over the baseline concentration shown in Table 12.2-5, and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of twenty-four (24) hours or less for more than eighteen (18) days, not necessarily consecutive, during any annual period.

Table 12.2-5.	Maximum	Allowable	Increase	$(\mu g/m^3)$
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Period of exposure	Low Terrain	High Terrain
24-hr maximum	36	62
3-hr maximum	130	221

12.2.16 Public Participation

12.2.16.1 Notice of Proposed Action

- (a) An application shall be deemed to be complete unless, within sixty (60) days of receipt, the Control Officer notifies the applicant by certified mail that the application is deficient and not complete. In the event of a deficiency, the date of receipt of the application shall be the date on which the Control Officer received all required information.
- (b) Within one (1) year after receipt of a complete application, the Control Officer shall:
 - (1) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved; and

- (2) Make available in at least one (1) location in each region in which the proposed source would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.
- (c) After receipt of a complete application for an Authority to Construct Permit under Sections 12.2, or 12.3 and 12.4, the Control Officer shall publish in a newspaper of general circulation within Clark County, Nevada, within each region in which the proposed source would be constructed, and on the department's web site a Notice of Proposed Action on the application containing the following:
 - (1) The date of the department's receipt of the completed application;
 - (2) The location where documents relevant to the application will be available;
 - (3) For an Authority to Construct Permit reviewed pursuant to Section 12.2, a summary of the following:
 - (A) The results of air quality modeling and any other air quality impact analyses;
 - (B) The results of the analysis of alternatives;
 - (C) The determination of BACT; and
 - (D) The level of PSD increments to be consumed by the source, as determined under Section 12.2.3.
 - (4) For an Authority to Construct Permit reviewed pursuant to Section 12.3, a summary of the following:
 - (A) Statewide compliance demonstration;
 - (B) Air quality impact analysis;
 - (C) Determination of the LAER; and
 - (D) Description of the emissions offsets relied upon in the application.
 - (5) The department's preliminary determination of whether the application should be approved or disapproved;
 - (6) The proposed Authority to Construct Permit conditions;

- (7) A determination by the Control Officer that the approval of the construction will not cause or contribute to a violation of a National Ambient Air Quality Standard, a PSD increment identified in Section 12.2.3, or otherwise violate any provisions of the Nevada SIP;
- (8) The total PTE of each regulated NSR pollutant, as applicable;
- (9) An opportunity for any person to submit written comments on the application and any documents relevant to the application; and
- (10) An opportunity for any person to request a public hearing at which oral and written comments on the application will be received, or notice of such a hearing if one has been scheduled.
- (d) All written comments must be received by the Control Officer within thirty (30) days from the publication date of the Notice of Proposed Action.

12.2.16.2 Distribution of Notice

The Control Officer shall send a copy of the Notice of Proposed Action to the applicant and to officials and agencies having jurisdiction over the location where the proposed construction would occur, including:

- (a) Any other state or local air pollution control agencies;
- (b) The chief executives of the city and county where the source would be located;
- (c) Any comprehensive regional land use planning agency;
- (d) Any state, Federal Land Manager, and Indian governing body whose lands may be affected by emissions from the source or modification;
- (e) The Regional Administrator for EPA's Region 9; and
- (f) Any other person who requests such notice.

12.2.16.3 Public Hearings

During the Notice of Proposed Action public comment period specified in Section 12.2.16.1, any person may petition the Control Officer, in writing, for a public hearing. All such petitions shall contain the petitioner's name, address, daytime telephone number, and the reason for requesting a hearing.

12.2.16.4 Time Frame

If a proper petition is filed, and the Control Officer determines that there is a significant degree of public interest, the Control Officer shall hold a public hearing no sooner than thirty (30) days after the date of the Notice of Proposed Action but no later than seventy (70) days, after the date of the Notice of Proposed Action. In determining if a significant degree of public interest exists, the Control Officer shall consider all relevant factors, including, but not limited to, the number of petitioners, the nature of their concerns as stated in their petitions, the type and quantity of pollutants emitted by the source and the proximity of the source to sensitive areas like parks, schools, hospitals, residential areas or Class 1 air sheds.

The petitioner and the applicant shall receive no less than seven (7) days' prior written notice of the date and location of the public hearing. Any notice of hearing shall also be posted on the department's website no less than seven (7) days prior to the public hearing.

12.2.16.5 Comments and Approvals

The Control Officer shall also:

- (a) Consider all written comments submitted within a time specified in the notice of public comment, and all comments received at any public hearing(s), in making a final decision on the approvability of the application. The Control Officer shall make all comments available for public inspection in the same locations where the Control Officer made available preconstruction information relating to the proposed source or modification;
- (b) Make a final determination whether construction should be approved, approved with conditions, or disapproved; and
- (c) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Control Officer made available preconstruction information and public comments relating to the source.

12.2.16.6 Enhanced Public Participation Procedures

If the terms and conditions of an Authority to Construct Permit are to be incorporated into a Part 70 Operating Permit through an administrative permit revision, as provided in paragraph (a)(5) of Section 12.5.2.13, in addition to the foregoing public participation procedures, the applicant shall comply with the requirements of Section 12.5.2.17.

12.2.17 Source Obligation

12.2.17.1 Enforcement

Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to Section 12.2 and with any changes to the application as required by the Control Officer, or with the terms of its Authority to Construct Permit, or any owner or operator of a source or modification subject to Section 12.2 who begins actual construction after the effective date of these AQRs without applying for and receiving an Authority to Construct Permit, shall be subject to enforcement action.

12.2.17.2 Termination

An Authority to Construct Permit shall terminate if construction is not commenced within eighteen (18) months after receipt of such permit if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time. The Control Officer may extend the 18-month period upon a satisfactory showing of good cause why an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen (18) months of the projected and approved commencement date.

12.2.17.3 Compliance

The issuance of an Authority to Construct Permit shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the Nevada SIP and any other requirements under local, state, or federal law.

12.2.17.4 Relaxation in Enforceable Limitations

At such time that a particular stationary 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 stationary source or modification otherwise to emit a pollutant, then the requirements of Sections 12.2.9 through 12.2.17 shall apply to the stationary source or modification as though construction had not yet commenced on the stationary source or modification.

12.2.18 Innovative Control Technology

12.2.18.1 Request for Approval

An owner or operator of a proposed major stationary source or major modification may request the Control Officer to approve a system of innovative control technology.

12.2.18.2 Requirements for Approval

The Control Officer may, with the consent of the governor of the state of Nevada and the governors of other affected states, determine that the major stationary source or major modification may employ a system of innovative control technology if:

- The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;
- (b) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under Section 12.2.9.2 by a date specified by the Control Officer. Such date shall not be later than four (4) years from the time of startup or seven (7) years from permit issuance;
- (c) The major stationary source or major modification would meet the requirements of Sections 12.2.9 and 12.2.10, based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the Control Officer;
- (d) The major stationary source or major modification would not, before the date specified by the Control Officer:
 - (1) Cause or contribute to a violation of an applicable National Ambient Air Quality Standard; or
 - (2) Impact any area where an applicable increment is known to be violated.
- (e) All other Applicable Requirements, including those for public participation, have been met; and
- (f) The provisions of Section 12.2.15 (relating to Class I areas) have been satisfied with respect to all periods during the life of the major stationary source or major modification.

12.2.18.3 Withdrawal of Approval

The Control Officer shall withdraw any approval to employ a system of innovative control technology made under Section 12.2.18.2 if:

- (a) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate;
- (b) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or
- (c) The Control Officer decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.

12.2.18.4 BACT Extension for Failure or Withdrawal

If a major stationary source or major modification fails to meet the required level of continuous emission reduction within the specified time period, or the approval is withdrawn in accordance with Section 12.2.18.3, the Control Officer may allow the major stationary source or major modification up to an additional three (3) years to meet the requirement for the application of BACT through use of a demonstrated system of control.

12.2.19 Plantwide Applicability Limits (PALs)

The provisions in Sections 12.2.19.1 through 12.2.19.15 of this section govern actuals PALs.

12.2.19.1 Applicability

- (a) The Control Officer may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in Sections 12.2.19.1 through 12.2.19.15. The term "PAL" shall mean "actuals PAL" throughout Section 12.2.19.
- (b) Any physical change in, or change in the method of operation of, a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements of Section 12.2.19, and complies with the Authority to Construct Permit:
 - (1) Is not a major modification for the PAL pollutant;
 - (2) Does not have to be approved through the PSD program; and
 - (3) Is not subject to the provisions in Section 12.2.17.4.

(c) Except as provided under paragraph (b)(3) of Section 12.2.19.1, a major stationary source shall continue to comply with all applicable federal, state or county requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

12.2.19.2 Definitions

- (a) Unless the context otherwise requires, the following terms shall have the meanings set forth below for the purposes of Section 12.2.19. When a term is not defined in these paragraphs, it shall have the meaning given in Section 12.2.2, Section 0, Section 12.4, or the Act.
 - (1) "Actuals PAL for a major stationary source" means a 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.
 - (2) "Allowable emissions" means "allowable emissions" as defined in paragraph (a)(3) of Section 12.2.2, except as that definition is modified according to paragraph (A) of this definition:
 - (A) 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.
 - (3) "Major emissions unit" means:
 - (A) Any emissions unit that emits, or has the potential to emit, 100 tpy or more of the PAL pollutant in an attainment area; or
 - (B) 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.
 - (4) "PAL" means an emission limitation, expressed in tpy, for a pollutant at a major stationary source that is enforceable as a practical matter and established source-wide in accordance with Sections 12.2.19.1 through 12.2.19.15.
 - (5) "PAL effective date" generally means the date of issuance of the Authority to Construct Permit. However, the PAL effective date for an increased PAL is the date any emissions unit which is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

- (6) "PAL effective period" means the period beginning with the PAL effective date and ending ten (10) years later.
- (7) "PAL major modification" means, notwithstanding the definitions for major modification and net emissions increase, any physical change in, or change in the method of operation of, the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.
- (8) "PAL pollutant" means the pollutant for which a PAL is established at a major stationary source.
- (9) "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 these AQRs or the Act, whichever is lower, for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit.
- (10) "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 these AQRs or the Act, whichever is lower.

12.2.19.3 Permit Application Requirements

As part of a an application for a Part 70 Operating Permit requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the Control Officer for approval:

- (a) A list of all emissions units at the source designated as small, significant, or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal, state or county applicable requirements, emission limitations, or work practices apply to each unit;
- (b) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction; and
- (c) 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 paragraph (a) of Section 12.2.19.13.

12.2.19.4 General Requirements for Establishing PALs

- (a) The Control Officer may establish a PAL at a major stationary source, provided that, at a minimum, the requirements in paragraphs (a)(1) through (a)(7) of Section 12.2.19.4 are met.
 - (1) The PAL shall impose an annual emission limitation, in tpy, that is enforceable as a practical matter for the entire major stationary source. For each month during the PAL effective period after the first twelve (12) months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous twelve (12) consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first eleven (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.
 - (2) The PAL shall be established in an Authority to Construct Permit that meets the public participation requirements in Section 12.2.19.5.
 - (3) The Authority to Construct Permit shall contain all the requirements of Section 12.2.19.7.
 - (4) 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.
 - (5) Each PAL shall regulate emissions of only one pollutant.
 - (6) Each PAL shall have a PAL effective period of ten (10) years.
 - (7) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in Sections 12.2.19.12 through 12.2.19.14 for each emissions unit under the PAL through the PAL effective period.
- (b) At no time during or after the PAL effective period are emissions reductions of a PAL pollutant which occur during the PAL effective period creditable as decreases for purposes of offsets under Section 12.3.6 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.

12.2.19.5 Public Participation Requirements for PALs

PALs for existing major stationary sources shall be established, renewed, or increased through the public participation procedures in Section 12.2.16.

12.2.19.6 Setting the 10-year Actuals PAL Level

- Except as provided in paragraph (b) of Section 12.2.19.6, the actuals (a) PAL level for a major stationary source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source plus an amount equal to the applicable significant level for the PAL pollutant under these AQRs or under the Act, whichever is lower. When establishing the actuals PAL level for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The Control Officer shall specify a reduced PAL level(s) (in tpy) in the Authority to Construct Permit, to become effective on the future compliance date(s) of any applicable federal or state regulatory requirement(s) that the Control Officer is aware of prior to issuance of the permit.
- (b) For newly constructed units (this does not include modifications to existing units) on which actual construction began after the 24-month period, in lieu of adding the baseline actual emissions as specified in paragraph (a) of Section 12.2.19.6, the emissions must be added to the PAL level in an amount equal to the PTE of the units.

12.2.19.7 Contents of a Part 70 Operating Permit Containing a PAL

The contents shall include the information in paragraphs Section 12.2.19.7 (a) through (j) as listed below:

- (a) The PAL pollutant and the applicable source-wide emission limitation in tpy.
- (b) The effective date and the expiration date of the PAL conditions (i.e., PAL effective period).
- (c) Specification in the permit that if a major stationary source owner or operator applies to renew the PAL conditions in accordance with Section 12.2.19.10 before the end of the PAL effective period, then the PAL conditions shall not expire at the end of the PAL effective period. It shall remain in effect until a revised Part 70 Operating Permit is issued by the Control Officer;

- (d) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns, and malfunctions;
- (e) A requirement that, once the PAL conditions expire, the major stationary source is subject to the requirements of Section 12.2.19.9;
- (f) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total, as required by paragraph (a) of Section 12.2.19.13;
- (g) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under Section 12.2.19.12;
- (h) A requirement to retain the records required under Section 12.2.19.13 on-site. Such records may be retained in an electronic format;
- (i) A requirement to submit the reports required under Section 12.2.19.14 by the required deadlines; and
- (j) Any other requirements that the Control Officer deems necessary to implement and enforce the PAL conditions.

12.2.19.8 PAL Effective Period and Reopening of the PAL Conditions in a Part 70 Operating Permit

The conditions in a Part 70 Operating Permit that contain a PAL shall include the following information:

- (a) **PAL Effective Period.** The Control Officer shall specify a PAL effective period of ten (10) years from the date of issuance.
- (b) **Reopening of the PAL Conditions in a Part 70 Operating Permit**
 - (1) During the PAL effective period, the permit shall require the Control Officer to reopen the PAL conditions in a Part 70 Operating Permit to:
 - (A) Correct typographical/calculation errors made in setting the PAL, or reflect a more accurate determination of emissions used to establish the PAL;
 - (B) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under Section 12.3; or

- (C) Revise the PAL to reflect an increase in the PAL, as provided under Section 12.2.19.11.
- (2) The Control Officer may reopen the conditions of a Part 70 Operating Permit authorizing a PAL for the following:
 - (A) Reduce the PAL to reflect newly applicable federal requirements with compliance dates after the PAL effective date.
 - (B) Reduce the PAL consistent with any other requirement that is enforceable as a practical matter, and that the Control Officer may impose on the major stationary source under the Nevada SIP.
 - (C) Reduce the PAL if the Control Officer determines that a reduction is necessary to avoid causing or contributing to a National Ambient Air Quality Standard or PSD increment violation, or to an adverse impact on an air quality-related value 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.
- (3) Except for the permit reopening in paragraph (b)(1)(A) of Section 12.2.19.8 for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out as significant permit revisions to a Part 70 Operating Permit.

12.2.19.9 Expiration of a PAL

Any PAL which is not renewed in accordance with the procedures in Section 12.2.19.10 shall expire at the end of the PAL effective period, and the requirements in paragraphs (a) through (e) of Section 12.2.19.9 shall apply.

- (a) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised Part 70 Operating Permit established according to the procedures in paragraphs (a)(1) and (a)(2) of Section 12.2.19.9:
 - (1) Within the time frame specified for PAL renewals in paragraph (b) of Section 12.2.19.10, the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Control Officer) by distributing the PAL allowable emissions for the affected major stationary 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 paragraph (e) of Section 12.2.19.10, such distribution shall be made as if the PAL had been adjusted.

- (2) The Control Officer will decide whether and how the PAL allowable emissions will be distributed and issue a revised Part 70 Operating Permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Control Officer determines is appropriate.
- (b) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Control Officer may approve the use of monitoring systems other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.
- (c) Until the Control Officer issues the revised Part 70 Operating Permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under paragraph (a)(2) of Section 12.2.19.9, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- (d) Any physical change in, or change in the method of operation at, the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification.
- (e) The major stationary source owner or operator shall continue to comply with any federal, state or county applicable requirements that may have applied either during the PAL effective period or prior to the PAL effective period, except for those limitations that were eliminated by the PAL in accordance with the provisions of paragraph (b)(3) of Section 12.2.19.1.

12.2.19.10 Renewal of a PAL

- (a) The Control Officer will follow the procedures specified in Sections 12.2.19.5 and 12.4 in approving any request to renew the PAL conditions in a Part 70 Operating Permit, and will 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 Control Officer.
- (b) **Application Deadline.** A major stationary source owner or operator shall submit a timely application to the Control Officer to request renewal of the PAL conditions in a Part 70 Operating Permit. A timely

application is one that is submitted at least six (6) months prior to, but not earlier than eighteen (18) prior to, the date of expiration of the Part 70 Operating Permit containing the PAL. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL conditions in a Part 70 Operating Permit within this time period, then the PAL conditions shall continue to be effective until the revised permit with the renewed PAL conditions is issued.

- (c) **Application Requirements.** The application to renew PAL conditions shall be incorporated into the application for renewal of the affected Part 70 Operating Permit, and shall contain the information required in paragraphs (c)(1) through (c)(4) of Section 12.2.19.10:
 - (1) The information required in paragraphs (a) through (c) of Section 12.2.19.3;
 - (2) A proposed PAL level;
 - (3) The sum of the PTE of all emissions units under the PAL (with supporting documentation); and
 - (4) Any other information the owner or operator wishes the Control Officer to consider in determining the appropriate level for renewing the PAL conditions.
- (d) PAL Adjustment. In determining whether and how to adjust the PAL, the Control Officer will consider the options outlined in paragraphs (d)(1) and (d)(2) of this Section 12.2.19.10. However, in no case may any such adjustment fail to comply with paragraph (d)(3) of Section 12.2.19.10.
 - If the emissions level calculated in accordance with Section 12.2.19.6 is equal to or greater than eighty (80) percent of the PAL level, the Control Officer may renew the PAL at the same level without considering the factors set forth in paragraph (d)(2) of Section 12.2.19; or
 - (2) The Control Officer may set the PAL at a level that he determines to be more representative of the source's baseline actual emissions, or that he or she 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 Control Officer in his or her written rationale.

- (3) Notwithstanding paragraphs (d)(1) and (d)(2) of Section 12.2.19:
 - (A) If the PTE of the major stationary source is less than the PAL, the Control Officer shall adjust the PAL to a level no greater than the PTE of the source; and
 - (B) The Control Officer shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of Section 12.2.19.11.
- (e) If the compliance date for a federal or state requirement that applies to the PAL source occurs during the PAL effective period, and if the Control Officer has not already adjusted for such requirement, the PAL shall be adjusted at the time of the PAL permit renewal or Part 70 Operating Permit renewal, whichever occurs first.

12.2.19.11 Increasing a PAL during the PAL Effective Period

- (a) The Control Officer may increase a PAL emission limitation only if the major stationary source complies with the provisions in paragraphs (a)(1) through (a)(4) of Section 12.2.19.11:
 - (1) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit as a significant revision to the affected Part 70 Operating Permit. Such 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.
 - (2) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions 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 or LAER requirement that was established within the preceding ten (10) years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.
 - (3) The owner or operator obtains an Authority to Construct Permit pursuant to Section 12.4 for all emissions unit(s) identified in

paragraph (a)(1) of Section 12.2.19.11, regardless of the magnitude of the emissions increase resulting from them. The emissions unit(s) shall comply with any emissions requirements resulting from the Authority to Construct Permit issuance process, even though it has also become subject to the PAL or continues to be subject to the PAL.

- (4) The PAL conditions in a Part 70 Operating Permit shall require that the increased PAL level be effective on the day any emissions unit that is part of the significant permit revision becomes operational and begins to emit the PAL pollutant.
- (b) The Control Officer shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT-equivalent controls as determined in accordance with paragraph (a)(2) of Section 12.2.19.11), plus the sum of the baseline actual emissions of the small emissions units.
- (c) The PAL conditions in a Part 70 Operating Permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of Section 12.2.19.5.

12.2.19.12 Monitoring Requirements for PALs

(a) General Requirements

- (1) The PAL conditions in a Part 70 Operating Permit must include enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL conditions 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 PAL conditions.
- (2) The PAL monitoring system must employ one (1) or more of the four (4) general monitoring approaches meeting the minimum requirements set forth in paragraphs (b)(1) through (b)(4) of Section 12.2.19.12, and must be approved by the Control Officer.
- (3) Notwithstanding paragraph (a)(2) of Section 12.2.19.12, the PAL monitoring system may also employ an alternative monitoring

approach that meets paragraph (a)(1) of Section 12.2.19.12 if approved by the Control Officer.

- (4) Failure to use a monitoring system that meets the requirements of Section 12.2.19 renders the PAL invalid.
- (b) **Minimum Performance Requirements for Approved Monitoring Approaches.** The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (c) through (i) of Section 12.2.19.12:
 - (1) Mass balance calculations for activities using coatings or solvents;
 - (2) CEMS;
 - (3) CPMS or PEMS; and
 - (4) Emission factors.
- (c) **Mass Balance Calculations.** An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coatings or solvents shall meet the following requirements:
 - 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;
 - (2) 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
 - (3) 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 Control Officer determines there is site-specific data or a site-specific monitoring program to support another content within the range.
- (d) **CEMS.** An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
 - (1) The CEMS must comply with applicable performance specifications found in 40 CFR Part 60, Appendix B; and

- (2) The CEMS must sample, analyze, and record data at least every fifteen (15) minutes while the emissions unit is operating.
- (e) **CPMS or PEMS.** An owner or operator using a CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:
 - (1) The CPMS or PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and
 - (2) Each CPMS or PEMS must sample, analyze, and record data at least every fifteen (15) minutes, or at another, less frequent interval approved by the Control Officer, while the emissions unit is operating.
- (f) **Emission Factors.** An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
 - All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
 - (2) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
 - (3) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six (6) months of permit issuance unless the Control Officer determines that testing is not required.
- (g) A source 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 Authority to Construct Permit.
- (h) Notwithstanding the requirements in paragraphs (c) through (g) of Section 12.2.19.12, 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 Control Officer shall, at the time of permit issuance:

- Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or
- (2) 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.
- (i) Revalidation. All data used to establish the PAL pollutant must be revalidated through performance testing or other scientifically valid means approved by the Control Officer. Such testing must occur at least once every five (5) years after issuance of the Part 70 Operating Permit containing the PAL conditions.

12.2.19.13 Recordkeeping Requirements

- (a) The PAL conditions in a Part 70 Operating Permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of Section 12.2.19 and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five (5) years from the date of such record.
- (b) The PAL conditions in a Part 70 Operating Permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five (5) years:
 - A copy of the PAL provisions in a permit application for a Part 70 Operating Permit and any applications for revisions to the affected Part 70 Operating Permit relevant to the PAL; and
 - (2) Each annual certification of compliance pursuant to the conditions in the affected Part 70 Operating Permit and the data relied on in certifying the compliance.

12.2.19.14 Reporting and Notification Requirements

The owner or operator shall submit semiannual monitoring reports and prompt deviation reports to the Control Officer, in accordance with the conditions in the affected Part 70 Operating Permit. The reports shall meet the requirements in paragraphs (a) through (c) of Section 12.2.19.14.

(a) **Semiannual Report.** The semiannual report shall be submitted to the Control Officer within thirty (30) days of the end of each reporting period. This report shall contain the information required in paragraphs (a)(1) through (7) of Section 12.2.19.14:

- (1) The identification of the owner and operator and the permit number;
- (2) Total annual emissions (in tpy), based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph (a) of Section 12.2.19.14;
- (3) 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;
- (4) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period;
- (5) 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;
- (6) 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, 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 paragraph (g) of Section 12.2.19.12; and
- (7) A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.
- (b) **Deviation Report.** The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL conditions, including periods where no monitoring was available. A report submitted pursuant to 40 CFR 70.6(a)(3)(iii)(B) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the affected Part 70 Operating Permit. The reports shall contain the following information:
 - (1) The identification of owner and operator and the permit number;
 - The PAL requirement that experienced the deviation or that was exceeded;
 - (3) Emissions resulting from the deviation or the exceedance; and

- (4) A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.
- (c) **Revalidation Results.** The owner or operator shall submit to the Control Officer the results of any revalidation test or method within three (3) months after completion of such test or method.

12.2.19.15 Transition Requirements

- (a) The Control Officer may not issue a PAL that does not comply with the requirements in Sections 12.2.19.1 through 12.2.19.15 after the Administrator has approved regulations incorporating these requirements into the Nevada SIP.
- (b) The Control Officer may supersede any PAL which was established prior to the date of approval of the Nevada SIP by the Administrator with a PAL that complies with the requirements of Sections 12.2.19.1 through 12.2.19.15.

12.2.20 Invalidation

If any provision of Section 12.2.19, or the application of such provision to any person or circumstance, is held invalid, the remainder of Section 12.2.19, 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.

History: Adopted May 18, 2010. Amended November 16, 2010; March 6, 2012; March 18, 2014.