#### Arkansas Regulation No. 31, Nonattainment New Source Review Requirements

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## ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION



# **REGULATION NO. 31**

# NONATTAINMENT NEW SOURCE REVIEW REQUIREMENTS

Approved by the Pollution Control and Ecology Commission April 28, 2006

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#### **CHAPTER 1: TITLE, INTENT, AND PURPOSE**

#### Reg. 31.101 Title

The following rules and regulations, adopted in accordance with the provisions of Subchapter 2 of the Arkansas Water and Air Pollution Control Act A.C.A. §§ 8-4-201 et seq., shall be known as "Nonattainment New Source Review Requirements," hereinafter referred to as "Regulation 31."

#### Reg. 31.102 Applicability

- (A) This regulation applies to any area in Arkansas designated nonattainment for any national ambient air quality standard under subpart C of 40 CFR Part 81.
- (B) This regulation shall apply to any new major stationary source or major modification that is major for the pollutant for which the area is designated nonattainment under Section 107(d)(1)(A)(i) of the Act, if the stationary source or modification would locate anywhere in the designated nonattainment area.

#### Reg. 31.103 Severability

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

#### **CHAPTER 2: DEFINITIONS**

Terms and phrases used in this regulation which are not explicitly defined herein shall have the same meaning as those terms which are used in the federal Clean Air Act. For the purposes of this regulation:

#### "Actual emissions" means

- (1) the actual rate of emissions of a regulated New Source Review (NSR) pollutant from an emissions unit, as determined in accordance with paragraphs (2) through (4) of this definition, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a Plantwide Applicability Limitation (PAL) under Chapter 8 of this regulation. Instead, the definitions of "projected actual emissions" and "baseline actual emissions" shall apply for those purposes.
- (2) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The reviewing authority 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.
- (3) The reviewing authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (4) 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.

"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 federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

- (1) The applicable standards set forth in 40 CFR Part 60 or 61;
- (2) Any applicable State Implementation Plan emissions limitation including those with a future compliance date; or
- (3) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

*"Baseline actual emissions"* means the rate of emissions, in tons per year, 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 tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The reviewing authority 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 noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
  - (c) 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.
  - (d) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by paragraph (1)(b) 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 tons per year, 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 reviewing authority for a permit required either under this section or under a plan approved by the EPA Administrator, 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, and emissions associated with startups, shutdowns, and malfunctions.
  - (b) 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.

- (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 currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the EPA Administrator proposed or promulgated under Part 63 of this chapter, the baseline actual emissions need only be adjusted if the State has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of Reg. 31.405(H) of this regulation.
- (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 tons per year, and for adjusting this amount if required by paragraphs (2)(b) and (c) 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 major 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.

"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.

"Best available control technology" (BACT) means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the reviewing authority, 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 best available control technology 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 reviewing authority 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.

"Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0065 and 003-005-00176-0, respectively).

"Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen 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.

"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 \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

"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 and either has:

- (1) Begun, or caused to begin, a continuous program of actual on-site 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.

"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.

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

"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).

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

*"Department"* means the Arkansas Department of Environmental Quality, or its successor. When reference is made in this regulation to actions taken by or with reference to the Department, the reference is to the staff of the Department acting at the direction of the Director.

"Director" means the director of the Arkansas Department of Environmental Quality, or its successor, acting directly or through the staff of the Department.

*"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.

"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 steam generating unit as defined in this chapter. For purposes of this regulation, 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 2 years from the date such emissions unit first operated.
- (2) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (1) above. A replacement unit, as defined in this chapter, is an existing emissions unit.

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

"Federally enforceable" means all limitations and conditions which are enforceable by the EPA Administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

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

"Lowest achievable emission rate" (LAER) means, for any source, the more stringent rate of emissions based on the following:

- (1) The most stringent emissions 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 stationary source demonstrates that such limitations are not achievable; or
- (2) The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within or 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.

#### "Major modification" means

- (1) any physical change in or change in the method of operation of a major stationary source that would result in:
  - (a) A significant emissions increase of a regulated NSR pollutant (as defined in this chapter); and
  - (b) A significant net emissions increase of that pollutant from the major stationary source.
- (2) Any significant emissions increase (as defined in this chapter) from any emissions units or net emissions increase (as defined in this chapter) at a major stationary source that is significant for volatile organic compounds shall be considered significant for ozone.
- (3) 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;
- (c) Use of an alternative fuel by reason of an order or rule Section 125 of the Clean Air Act;
- (d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- (e) Use of an alternative fuel or raw material by a stationary source which;
  - (i) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 12, 1976 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166, or
  - (ii) The source is approved to use under any permit issued under regulations approved pursuant to 40 CFR 165.
- (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 December 21, 1976 pursuant to 40 CFR 52.21 or regulations approved pursuant to 40 CFR Part 51 Subpart I or 40 CFR 51.166.
- (g) Any change in ownership at a stationary source.
- (h) [Reserved]
- (i) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
  - (i) The State Implementation Plan for the State in which the project is located, and
  - (ii) Other requirements necessary to attain and maintain the national ambient air quality standard during the project and after it is terminated.
- (4) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under Chapter 8 of this regulation for a PAL for that pollutant. Instead, the definition at Reg. 31.802(H) of this regulation shall apply.

- (5) For the purpose of applying the requirements of Reg. 31.409 of this regulation to modifications at major stationary sources of nitrogen oxides located in ozone nonattainment areas or in ozone transport regions, whether or not subject to subpart 2, Part D, Title I of the Clean Air Act, any significant net emissions increase of nitrogen oxides is considered significant for ozone.
- (6) Any physical change in, or change in the method of operation of, a major stationary source of volatile organic compounds that results in any increase in emissions of volatile organic compounds from any discrete operation, emissions unit, or other pollutant emitting activity at the source shall be considered a significant net emissions increase and a major modification for ozone, if the major stationary source is located in an extreme ozone nonattainment area that is subject to subpart 2, Part D, Title I of the Clean Air Act.

#### "Major stationary source" means:

- (1) [Reserved]
  - (a) Any stationary source of air pollutants which emits, or has the potential to emit 100 tons per year or more of any regulated NSR pollutant, or
  - (b) Any physical change that would occur at a stationary source not qualifying under paragraph (1)(a) as a major stationary source, if the change would constitute a major stationary source by itself.
- (2) 'Any stationary source of air pollutants that
  - (a) emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant, except that lower emissions thresholds shall apply in areas subject to subpart 2, subpart 3, or subpart 4 of Part D, Title I of the Clean Air Act, according to paragraphs (1)(a)(i) through (vi) of this definition.
    - (i) 50 tons per year of volatile organic compounds in any serious ozone nonattainment area.
    - (ii) 50 tons per year of volatile organic compounds in an area within an ozone transport region, except for any severe or extreme ozone nonattainment area.
    - (iii) 25 tons per year of volatile organic compounds in any severe ozone nonattainment area.
    - (iv) 10 tons per year of volatile organic compounds in any extreme ozone nonattainment area.
    - (v) 50 tons per year of carbon monoxide in any serious nonattainment area for carbon monoxide, where stationary sources contribute

significantly to carbon monoxide levels in the area (as determined under rules issued by the EPA Administrator).

- (vi) 70 tons per year of PM-10 in any serious nonattainment area for PM-10;
- (b) For the purposes of applying the requirements of Reg. 31.409 of this regulation to stationary sources of nitrogen oxides located in an ozone nonattainment area or in an ozone transport region, any stationary source which emits, or has the potential to emit, 100 tons per year or more of nitrogen oxides emissions, except that the emission thresholds in paragraphs (1)(b)(i) through (vi) of this definition shall apply in areas subject to subpart 2 of Part D, Title I of the Clean Air Act.
  - (i) 100 tons per year or more of nitrogen oxides in any ozone nonattainment area classified as marginal or moderate.
  - (ii) 100 tons per year or more of nitrogen oxides in any ozone nonattainment area classified as a transitional, submarginal, or incomplete or no data area, when such area is located in an ozone transport region.
  - (iii) 100 tons per year or more of nitrogen oxides in any area designated under Section 107(d) of the Clean Air Act as attainment or unclassifiable for ozone that is located in an ozone transport region.
  - (iv) 50 tons per year or more of nitrogen oxides in any serious nonattainment area for ozone.
  - (v) 25 tons per year or more of nitrogen oxides in any severe nonattainment area for ozone.
  - (vi) 10 tons per year or more of nitrogen oxides in any extreme nonattainment area for ozone; or
- (c) Any physical change that would occur at a stationary source not qualifying under paragraphs (a) or (b) of this definition as a major stationary source, if the change would constitute a major stationary source by itself.
- (3) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.
- (4) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this paragraph whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

- (a) Coal cleaning plants (with thermal dryers);
- (b) Kraft pulp mills;
- (c) Portland cement plants;
- (d) Primary zinc smelters;
- (e) Iron and steel mills;
- (f) Primary aluminum ore reduction plants;
- (g) Primary copper smelters;
- (h) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (i) Hydrofluoric, sulfuric, or nitric acid plants;
- (j) Petroleum refineries;
- (k) Lime plants;
- (1) Phosphate rock processing plants;
- (m) Coke oven batteries;
- (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
- (p) Primary lead smelters;
- (q) Fuel conversion plants;
- (r) Sintering plants;
- (s) Secondary metal production plants;
- (t) Chemical process plants;
- (u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (w) Taconite ore processing plants;

- (x) Glass fiber processing plants;
- (y) Charcoal production plants;
- (z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; and
- (aa) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Clean Air Act.

"Necessary preconstruction approvals or permits" means those Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

#### "Net emissions increase" means:

- (1) with respect to any regulated NSR pollutant emitted by a major stationary source, 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 Chapter 4 of this regulation; 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. Baseline actual emissions for calculating increases and decreases under this paragraph shall be determined as provided in this chapter, except that paragraphs (1)(c) and (2)(d) of the definition of baseline actual emissions shall not apply.
- (2) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs;
- (3) An increase or decrease in actual emissions is creditable only if:
  - (a) It occurs between:
    - (i) The date five years before construction on the particular change commences; and
    - (ii) The date that the increase from the particular change occurs.
  - (b) The reviewing authority has not relied on it in issuing a permit for the source under this regulation, which permit is in effect when the increase in actual emissions from the particular change occurs; and
  - (c) [Reserved]

- (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 emission 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; and
  - (c) The reviewing authority has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR Part 51 subpart I or the State has not relied on it in demonstrating attainment or reasonable further progress;
  - (d) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and
  - (e) [Reserved]
- (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.
- (7) Paragraph (2) of the definition of actual emissions shall not apply for . determining creditable increases and decreases or after a change.

"Nonattainment major new source review (NSR) program" means a major source preconstruction permit program that has been approved by the EPA Administrator and incorporated into the plan to implement the requirements of 40 CFR 51.165, or a program that implements Part 51, appendix S, Sections I through VI of that chapter. Any permit issued under such a program is a major NSR permit..

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

"Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source. "Predictive emissions monitoring system" (PEMS) means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O2 or CO2 concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

"Prevention of Significant Deterioration (PSD) permit" means any permit that is issued under Chapter 9 of the Regulations of the Arkansas Plan of Implementation of Air Pollution Control, Regulation 19.

#### "Projected actual emissions" means,

- (1) The maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.
- (2) In determining the projected actual emissions under paragraph (1) of this definition 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 the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved plan;
  - (b) Shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions; and
  - (c) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under this chapter and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or,
  - (d) In lieu of using the method set out in paragraphs (2)(a) through (c) of this definition, may elect to use the emissions unit's potential to emit, in tons per year, as defined in this chapter.

*"Project"* means a physical change in, or change in the method of operation of, an existing major stationary source.

"Regulated NSR pollutant," for purposes of this regulation, means the following:

- (1) Nitrogen oxides or any volatile organic compounds;
- (2) Any pollutant for which a national ambient air quality standard has been promulgated; or
- (3) Any pollutant that is a constituent or precursor of a general pollutant listed under paragraphs (1) or (2) of this definition, provided that a constituent or precursor pollutant may only be regulated under NSR as part of regulation of the general pollutant.

*"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.

- (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.

"Reviewing authority" means the Arkansas Department of Environmental Quality.

"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 this section, 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 of operation of the major stationary source of 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.

#### "Significant" means:

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

Pollutant	Emission Rate		
Carbon monoxide:	100 tons per year (tpy)		
Nitrogen oxides:	40 tpy		
Sulfur dioxide:	40 tpy		
Ozone:	40 tpy of volatile organic compounds or NOx		
Lead:	0.6 tpy		
PM <sub>10</sub>	15 tpy PM <sub>10</sub>		

- (2) Notwithstanding the significant emissions rate for ozone in paragraph (1) of this definition, significant means, in reference to an emissions increase or a net emissions increase, any increase in actual emissions of volatile organic compounds that would result from any physical change in, or change in the method of operation of, a major stationary source locating in a serious or severe ozone nonattainment area that is subject to subpart 2, Part D, Title I of the Clean Air Act, if such emissions increase of volatile organic compounds exceeds 25 tons per year.
- (3) For the purposes of applying the requirements of Reg. 31.409 of this regulation to modifications at major stationary sources of nitrogen oxides located in an ozone nonattainment area or in an ozone transport region, the significant emission rates and other requirements for volatile organic compounds in paragraphs (1), (2), and (5) of this definition shall apply to nitrogen oxides emissions.
- (4) Notwithstanding the significant emissions rate for carbon monoxide under paragraph (1) of this definition, significant means, in reference to an emissions increase or a net emissions increase, any increase in actual emissions of carbon monoxide that would result from any physical change in, or change in the method of operation of, a major stationary source in a serious nonattainment area for carbon monoxide if such increase equals or exceeds 50 tons per year, provided the EPA Administrator has determined that stationary sources contribute significantly to carbon monoxide levels in that area.
- (5) Notwithstanding the significant emissions rates for ozone under paragraphs (1) and (2) of this definition, any increase in actual emissions of volatile organic compounds from any emissions unit at a major stationary source of volatile organic compounds located in an extreme ozone nonattainment area that is subject to subpart 2, Part D, Title I of the Clean Air Act shall be considered a significant net emissions increase.

"Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in this chapter) for that pollutant.

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

"Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State Implementation Plan for the state in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

"Volatile organic compounds" (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.

(1) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity:

acetone; methane; ethane; methylene chloride (dichloromethane); 1,1,1- trichloroethane (methyl chloroform); perchloroethylene (tetrachloroethylene); 1.1.1 trichloro-2.2.2- trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,2-dichloro 1,1, 2, 2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124): pentaflurorethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated siloxanes; 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca);

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

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

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

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

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

chlorofluoromethane (HCFC-31);

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

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

1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C<sub>4</sub>F<sub>9</sub>OCH<sub>3</sub> or HFE-7100);

2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-

heptafluoropropane((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>);

1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C<sub>4</sub>F<sub>9</sub>OC<sub>2</sub>H<sub>5</sub> or HFE-7200);

2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>);

methyl acetate 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C3F7 OCH3, HFE-7000), 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2- (trifluoromethyl) hexane (HFE-7500), 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea), and methyl formate (HCOOCH<sub>3</sub>), and perfluorocarbon compounds which fall into these classes:

- (a) cyclic, branched, or linear, completely fluorinated alkanes;
- (b) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- (c) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- (d) sulfur containing perfluorocarbons with no saturations and with sulfur bonds only to carbon and fluorine.
- (2) For purposes of determining compliance with emission limits, VOC will be measured by the test methods in the approved SIP or 40 CFR Part 60, appendix A, as applicable. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOC if the amount of such compounds is accurately quantified, and such exclusion is approved by the Department.
- (3) As a precondition to excluding these compounds as VOC or at any time thereafter, the Department may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of the Department, the amount of negligibly reactive compounds in the sources' emissions.
- (4) The following compound(s) are VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission

reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements: t-butyl acetate.

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#### **CHAPTER 3: PRECONSTRUCTION REVIEW**

#### **Reg. 31.301** Requirement for a Permit

- (A) No major stationary source shall be constructed or modified in any nonattainment area if the emissions from such facility will cause or contribute to concentrations of any pollutant for which a national ambient air quality standard is exceeded in such area, without first obtaining a permit which requires the proposed source is to be constructed or modified in accordance with the requirements of this Regulation.
- (B) The requirements in paragraph (A) apply only to major stationary sources of emissions that cause or contribute to concentrations of the pollutant for which the nonattainment area was designated as nonattainment. A major stationary source or major modification that is major for volatile organic compounds is also major for ozone.

#### **Reg. 31.302 Required Information**

(A) General

Application for a permit shall be made on such forms and contain such information as the Department may reasonably require, including but not limited to:

- (1) Information on the nature and amounts of federally regulated air pollutants to be emitted by the stationary source; and
- (2) Such information on the location, design, construction, and operation of the stationary source as the Department may reasonably require.
- (B) Duty to Supplement Submittal

If, while processing an application that has been determined to be complete, the Department determines that additional information is necessary to evaluate or take final action on that application, the Department may request such information in writing and set a reasonable deadline for a response.

(C) Duty to Correct Submittal

Any owner/operator who fails to submit any relevant facts or who has submitted incorrect information, shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any relevant requirements that become applicable to the stationary source before final action is taken on its application.

#### Reg. 31.303 Approval Criteria

No permit shall be granted or modified under this chapter unless:

- (A) The owner/operator demonstrates to the reasonable satisfaction of the Department that the stationary source will be constructed or modified to operate without resulting in a violation of applicable portions of this regulation or without interfering with the attainment or maintenance of a national ambient air quality standard in the state in which the proposed source (or modification) is located or in a neighboring state;
- (B) The Director determines that, by the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained, such that total allowable emissions from existing sources in the nonattainment area, from new or modified sources which are not major emitting facilities, and from the proposed source will be sufficiently less than total emissions from existing sources prior to the application for such permit to construct or modify so as to represent reasonable further progress toward achievement of the national primary ambient air quality standards;
- (C) The proposed source is required to comply with the lowest achievable emission rate;
- (D) The owner or operator of the proposed source has demonstrated that all major stationary sources owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in the state are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards; and,
- (E) An analysis of alternative sites, sizes, and production processes, and environmental control techniques for such proposed source demonstrates that benefits of the proposed source significantly outweighs the environmental and social costs imposed as a result of its location, construction, or modification.

#### Reg. 31.304 Offsets

- (A) The owner or operator of a new or modified major stationary source may comply with any offset requirement for increased emissions of any air pollutant only by obtaining emission reductions of such air pollutant or precursor of such air pollutant from the same source or other sources in the same nonattainment area.
- (B) An owner or operator of a new or modified major stationary source may obtain such emission reductions in another nonattainment area if the other area has an equal or higher nonattainment classification than the area in which the source is located and emissions from such other area contribute to a violation of the national primary ambient air quality standard in the nonattainment area in which the source is located.
- (C) Emissions reductions shall be, by the time a new or modified major stationary source commences operation, in effect and enforceable and shall assure that the total tonnage of increased emissions of the relevant air pollutant from the new or modified source shall be offset by an equal or greater reduction in the actual emissions of such air pollutant from the same or other sources in the nonattainment area.

- (D) Emissions reductions required by the Clean Air Act shall not be creditable as emissions reductions for purposes of any such offset requirement. Incidental emission reductions which are not otherwise federally required shall be creditable as emissions reductions.
- (E) For areas of Crittenden County outside zones targeted for economic development the ratio of total emission reductions of volatile organic compounds and oxides of nitrogen to total increased emissions of such air pollutants shall be at least 1.1 to 1.

#### **Reg 31.305 Zones Targeted for Economic Development**

- (A) These regulations provide for management of any zone in Arkansas identified as a Zone Targeted for Economic Development pursuant to §173(a)(1)(B) of the Clean Air Act.
- (B) There are established Targeted Economic Development Zone (TEDZ) Emissions by area in the amount of:
  - (1) Crittenden County:
    - (a) 1,900 tons per year of VOC and 300 tons per year of nitrogen oxides beginning January 1, 2007 and
    - (b) 3,700 tons per year of VOC and 800 tons per year of nitrogen oxides beginning January 1, 2009.
- (C) In lieu of obtaining offsets as required in Reg. 31.303(B) and Reg. 31.304, a source locating in a Zone Targeted for Economic Development described in Reg. 31.305(A) a source may petition the Director to allocate TEDZ emissions established under paragraph (B) for offsets. A source must either obtain offsets as required in Reg. 31.303(B) and Reg. 31.304 or obtain growth allowance for the applicable TEDZ pursurant to Reg. 31.305.
- (D) Any petition for an allocation of TEDZ emissions shall:
  - (1) Be made on such forms and contain such information as the Director may reasonably require,
  - (2) Contain detailed information about the projected socio-economic impact of the proposed project including, but not limited to:
    - (a) Impact of the project on low to moderate income individuals,
    - (b) Number of jobs to be created,
    - (c) Median salary of employees,
  - (3) Contain a project schedule,
  - (4) Be separate and distinct from the permit application required under Reg. 31.302, and

- (5) Be submitted concurrently with the application required under Reg. 31.302.
- (E) Before taking final action on a petition for an allocation of TEDZ emissions, the Director shall solicit input from the appropriate local governing body.
- (F) The Director shall not allocate any TEDZ emissions unless he is reasonably satisfied that:
  - (1) The project will achieve the economic impact described in the petition,
  - (2) The projected economic impact justifies the allocation of TEDZ emissions, and
  - (3) No other projects which do more to further the region's economic development goals will be pre-empted.
- (G) If, while processing a petition, the Director determines that additional information is necessary to evaluate or take final action on that petition, the Director may request such information in writing and set a reasonable deadline for a response.
- (H) Any petitioner who fails to submit any relevant facts or who has submitted incorrect information in a petition shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.
- (I) If the Director determines the requirements of Reg. 31.305(F) are met he shall prepare a document announcing his intent to grant the allocation of TEDZ emissions. This document may contain such conditions as are necessary to ensure compliance with regulation and that the project is completed as described in the petition.
- (J) No petition may be granted unless the public has first had an opportunity to comment. The opportunity to comment shall include:
  - (1) The publication of a notice of the Director's decision in a newspaper of general circulation in the county in which the proposed facility will be located. In the event the local newspaper is unable or unwilling to publish notice, notice may be published in a newspaper of statewide circulation, and
  - (2) A 30-day period for submittal of public comment, beginning on the date of the newspaper notice, ending on the date 30 days later.
- (K) The notice required under Reg. 31.305(J) may be issued concurrently with the notice required under Reg. 31.309(C).
- (L) The Director shall take final action on a petition after the close of the public comment period. The Director shall notify in writing the owner/operator and any person that submitted a written comment, of the Director's final action and the Director's reasons for his final action.
- (M) A final decision on a petition by the Director constitutes a final permitting decision under Arkansas Pollution Control and Ecology Commission Regulation 8, Administrative

Procedures for appeal purposes.

- (N) The air permit application submitted concurrently with the petition for an allocation of TEDZ emissions shall not be considered complete until final action is taken on the petition.
- (O) Any petition issued under this section is subject to revocation, suspension, or modification in whole or in part, for cause, including without limitation:
  - (1) Violation of any condition established by the Director;
  - (2) Obtaining the allocations by misrepresentation or failure to disclose fully all relevant facts;
  - (3) Failure to complete the project within the time periods specified by the project schedule; or
  - (4) Failure to achieve the projected socio-economic impacts.
- (P) Petitions for allocations may be granted in whole, in part, or denied. If a petition for allocation is granted in part or denied, the applicant must obtain offsets in the required ratios under the Clean Air Act pursuant to Reg. 31.303(B) and Reg. 31.304. If a petition is granted, either in part or in whole, the applicant will be notified of the decision, and the allocations granted will be subtracted from the overall EDZ allocation pool. A 10% reserve of allocations will be maintained in the pool, unless the Director approves the disbursement of these "safety factor" allocations.
- (Q) The issuance of allocations does not convey any property rights to the owner/operator.
- (R) In the event future changes in source operation and/or regulation renders all or some of the allocations unneeded, the surplus allocations shall be returned.
- (S) Except as provided in this chapter, TEDZ emissions allocations shall be good for the life of the project.

#### **Reg. 31.306** Control Technology Information

Control technology information from permits issued under this chapter shall be promptly submitted to the RACT/BACT/LAER clearinghouse for the benefit of other states and the general public.

#### Reg. 31.307 Approval to Construct

Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provision of the plan and any other requirements under local, State or Federal law.

#### Reg. 31.308 Applicability to Attainment or Unclassifiable Areas

- (A) This regulation shall apply to any new major stationary source or major modification that would locate in any area designated as attainment or unclassifiable for any national ambient air quality standard pursuant to Section 107 of the Clean Air Act, when it would cause or contribute to a violation of any national ambient air quality standard.
- (B) A major 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 following significance levels at any locality that does not or would not meet the applicable national standard:

Pollutant	Averaging Time (hours)						
	Annual	24	8	3	1		
SO <sub>2</sub>	1.0 μg/m <sup>3</sup>	5 μg/m <sup>3</sup>		25 μg/m <sup>3</sup>			
PM <sub>10</sub>	$1.0 \ \mu g/m^3$	$5 \mu g/m^3$					
NO <sub>2</sub>	1.0 μg/m <sup>3</sup>		-				
CO			$0.5 \mu g/m^3$		$2 \text{ mg/m}^3$		

- (C) A proposed major source or major modification subject to Reg. 31.308 of this Regulation may reduce the impact of its emissions upon air quality by obtaining sufficient emission reductions to, at a minimum, compensate for its adverse ambient impact where the major source or major modification would otherwise cause or contribute to a violation of any national ambient air quality standard. In the absence of such emission reductions, the Director shall deny the proposed construction.
- (D) The requirements of Reg. 31.308 of this regulation 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 source or modification is located in an area designated as nonattainment pursuant to Section 107 of the Clean Air Act.

#### **Reg. 31.309** Applicability of Other Regulations

- (A) The administrative requirements contained in the Arkansas Pollution Control and Ecology Commission, Regulations of the Arkansas Operating Air Permit Program, Regulation 26, shall apply to permits issued under this regulation.
- (B) The permit modification and administrative permit amendments procedures contained in the Regulations of the Arkansas Operating Air Permit Program, Regulation 26, shall apply to permits issued under this regulation.
- (C) The public notice requirements contained in the Regulations of the Arkansas Operating Air Permit Program, Regulation 26, shall apply to permits issued under this regulation.
- (D) All facilities subject to permitting under this regulation shall pay fees in accordance with Regulation 9.

- (E) All major stationary sources subject to this regulation shall comply with all applicable provisions of the Arkansas Pollution Control and Ecology Commission, Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19. This includes, but is not limited to, the stack height requirements contained in Chapter 5, and the upset and emergency conditions contained in Chapter 6 of Regulation 19. The requirements of Chapter 9 of Regulation 19 do not apply to sources subject to this regulation.
- (F) All major stationary sources subject to this regulation shall comply with the provisions of Regulation 26. This regulation in no way alters a source's responsibilities under Regulation 26.
- (G) All major stationary sources subject to this regulation shall comply with the provisions of the Arkansas Pollution Control and Ecology Commission, Air Pollution Control Code, Regulation 18. This regulation in no way alters a source's responsibilities under Regulation 18.

#### CHAPTER 4: APPLICABILITY TESTS

#### Reg. 31.401 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 (as defined in Chapter 2 of this regulation) and the baseline actual emissions (as defined in Chapter 2 of this regulation, as applicable), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in Chapter 2 of this regulation).

#### Reg. 31.402 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 (as defined in Chapter 2 of this regulation) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in Chapter 2 of this regulation) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in Chapter 2 of this regulation).

Reg. 31.403 [Reserved]

Reg. 31.404 [Reserved]

#### **Reg. 31.405 Emission Baseline Credits**

- (A) For sources and modifications subject to this regulation, the baseline for determining credit for emissions reductions is the emissions limit under the applicable State Implementation Plan in effect at the time the application to construct is filed, except that the offset baseline shall be the actual emissions of the source from which offset credit is obtained where;
  - (1) The demonstration of reasonable further progress and attainment of ambient air quality standards is based upon the actual emissions of sources located within a designated nonattainment area for which the preconstruction review program was adopted; or
  - (2) The applicable State Implementation Plan does not contain an emissions limitation for that source or source category.
- (B) Where the emissions limit under the applicable State Implementation Plan allows greater emissions than the potential to emit of the source, emissions offset credit will be allowed only for control below this potential.
- (C) For an existing fuel combustion source, credit shall be based on the allowable emissions under the applicable State Implementation Plan for the type of fuel being burned at the time the application to construct is filed. If the existing source commits to switch to a cleaner fuel at some future date, emissions offset credit based on the allowable (or actual)

emissions for the fuels involved is not acceptable, unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emissions reduction should the source switch back to a dirtier fuel at some later date. The reviewing authority should ensure that adequate long-term supplies of the new fuel are available before granting emissions offset credit for fuel switches.

- (D) Emissions reductions achieved by shutting down an existing source or curtailing production or operating hours:
  - (1) May be generally credited for offsets if they meet the requirements in Reg. 31.405(D)(1)(a) through (b) of this regulation.
    - (a) Such reductions are surplus, permanent, quantifiable, and federally enforceable.
    - (b) The shutdown or curtailment occurred after the last day of the base year for the SIP planning process. For purposes of this paragraph, a reviewing authority may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop the attainment demonstration explicitly includes the emissions from such previously shutdown or curtailed emission units. However, in no event may credit be given for shutdowns that occurred before August 7, 1977.
  - (2) And that do not meet the requirements in Reg. 31.405(D)(1)(b) of this regulation may be generally credited only if:
    - (a) The shutdown or curtailment occurred on or after the date the construction permit application is filed; or
    - (b) The applicant can establish that the proposed new emissions unit is a replacement for the shutdown or curtailed emissions unit, and the emissions reductions achieved by the shutdown or curtailment met the requirements of Reg. 31.405(D)(1)(a) of this regulation.
- (E) No emissions credit may be allowed for replacing one hydrocarbon compound with another of lesser reactivity, except for those compounds listed in Table 1 of EPA's "Recommended Policy on Control of Volatile Organic Compounds" (42 FR 35314, July 8, 1977.)
- (F) All emission reductions claimed as offset credit shall be federally enforceable.
- (G) Procedures relating to the permissible location of offsetting emissions are found in Reg. 31.304.
- (H) Credit for an emissions reduction can be claimed to the extent that the reviewing authority has not relied on it in issuing any permit under regulations approved pursuant to

40 CFR Part 51 Subpart I or the State has not relied on it in demonstration attainment or reasonable further progress.

- (I) [Reserved]
- (J) [Reserved]
- (K) The total tonnage of increased emissions, in tons per year, resulting from a major modification that must be offset in accordance with Section 173 of the Act shall be determined by summing the difference between the allowable emissions after the modification (as defined by Chapter 2 of this regulation) and the actual emissions before the modification (as defined in Chapter 2 of this regulation) for each emissions unit.

#### **Reg. 31.406 Relaxation of Limitations**

At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforcement limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of this regulation shall apply to the source or modification as though construction had not yet commenced on the source or modification.

#### **Reg. 31.407 Modifications to Existing Units**

The following specific provisions apply to projects at existing emissions units at a major stationary source in circumstances where the owner or operator elects to use the method specified in paragraphs (2)(a) through (c) of the definition of "projected actual emissions" for calculating projected actual emissions.

- (A) Before beginning actual construction of the project, 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 (2)(c) of the definition of "projected actual emissions" and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- (B) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in Reg. 31.407(A) of this regulation to the reviewing authority. Nothing in this Reg.

31.407(B) shall be construed to require the owner or operator of such a unit to obtain any determination from the reviewing authority 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 is emitted by any emissions units identified in Reg. 31.407(A)(2) of this regulation; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR pollutant at such emissions unit.
- (D) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the reviewing authority within 60 days after the end of each year during which records must be generated under Reg. 31.407(C) of this regulation setting out the unit's annual emissions during the year that preceded submission of the report.
- (E) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the reviewing authority if the annual emissions, in tons per year, from the project identified in Reg. 31.407(A) of this regulation, exceed the baseline actual emissions as documented and maintained pursuant to Reg. 31.407(A)(3) of this regulation, by a significant amount (as defined in Chapter 2 of this regulation) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to Reg. 31.407(A)(3) of this regulation. Such report shall be submitted to the reviewing authority within 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 Reg. 31.407(C) of this regulation; 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)

#### Reg. 31.408 Public Availability of Information

The owner or operator of the source shall make the information required to be documented and maintained pursuant to Reg. 31.407 of this regulation available for review upon a request for inspection by the reviewing authority or the general public, except for information entitled to confidential treatment. The contents of a permit shall not be entitled to confidential treatment.

#### Reg. 31.409 Applicability to Nitrogen Oxides

The requirements of this section applicable to major stationary sources and major modifications of volatile organic compounds shall apply to nitrogen oxides emissions from major stationary sources and major modifications of nitrogen oxides in an ozone transport region or in any ozone

nonattainment area, except in ozone nonattainment areas or in portions of an ozone transport region where the EPA Administrator has granted a NOx waiver applying the standards set forth under Section 182(f) of the Clean Air Act and the waiver continues to apply.

#### **Reg. 31.410 Offest Requirements**

- (A) In meeting the emissions offset requirements of Reg. 31.405 of this regulation for ozone nonattainment areas that are subject to subpart 2, Part D, Title I of the Clean Air Act, the ratio of total actual emissions reductions of VOC to the emissions increase of VOC shall be as follows:
  - (1) In any marginal nonattainment area for ozone--at least 1.1:1;
  - (2) In any moderate nonattainment area for ozone--at least 1.15:1;
  - (3) In any serious nonattainment area for ozone--at least 1.2:1;
  - (4) In any severe nonattainment area for ozone--at least 1.3:1 (except that the ratio may be at least 1.2:1 if the approved plan also requires all existing major sources in such nonattainment area to use BACT for the control of VOC); and
  - (5) In any extreme nonattainment area for ozone--at least 1.5:1 (except that the ratio may be at least 1.2:1 if the approved plan also requires all existing major sources in such nonattainment area to use BACT for the control of VOC); and
- (B) Notwithstanding the requirements of Reg. 31.410(A) of this regulation for meeting the requirements of Reg. 31.405 of this regulation, the ratio of total actual emissions reductions of VOC to the emissions increase of VOC shall be at least 1.15:1 for all areas within an ozone transport region that is subject to subpart 2, Part D, Title I of the Clean Air Act, except for serious, severe, and extreme ozone nonattainment areas that are subject to subpart 2, Part D, Title I of the Clean Air Act.
- (C) In meeting the emissions offset requirements of Reg. 31.405 of this regulation for ozone nonattainment areas that are subject to subpart 1, Part D, Title I of the Clean Air Act (but are not subject to subpart 2, Part D, Title I of the Clean Air Act, including 8-hour ozone nonattainment areas subject to 40 CFR 51.902(b)), the ratio of total actual emissions reductions of VOC to the emissions increase of VOC shall be at least 1:1.

#### Reg. 31.411 PM<sub>10</sub> Precursors

The requirements of this Regulation applicable to major stationary sources and major modifications of  $PM_{10}$  shall also apply to major stationary sources and major modifications of  $PM_{10}$  precursors, except where the EPA Administrator determines that such sources do not contribute significantly to  $PM_{10}$  levels that exceed the  $PM_{10}$  ambient standards in the area.

### CHAPTER 5: [RESERVED]

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# CHAPTER 6: [RESERVED]

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CHAPTER 7: [RESERVED]

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# CHAPTER 8: ACTUAL PALs

#### Reg. 31.801 Applicability

- (A) The reviewing authority may approve the use of an actuals PAL for any existing major stationary source (except as provided in Reg. 31.801(B) of this chapter) if the PAL meets the requirements in Reg. 31.801 through Reg. 31.816 of this chapter. The term "PAL" shall mean "actuals PAL" throughout this chapter.
- (B) The reviewing authority shall not allow an actuals PAL for VOC or NOx for any major stationary source located in an extreme ozone nonattainment area.
- (C) 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 in Reg. 31.801 through Reg. 31.816 of this chapter, and complies with the PAL permit:
  - (1) Is not a major modification for the PAL pollutant;
  - (2) Does not have to be approved through the plan's nonattainment major NSR program; and
  - (3) Is not subject to the provisions in Reg. 31.406 of this regulation (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the nonattainment major NSR program).
- (D) Except as provided under Reg. 31.801(C)(3) of this chapter, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

## **Reg. 31.802 Definitions**

For purposes of this chapter the following definitions apply. When a term is not defined in this chapter, it shall have the meaning given in Chapter 2 of this regulation or in the federal Clean Air Act.

- (A) "Actuals PAL for a major stationary source" means a PAL based on the baseline actual emissions (as defined in Chapter 2 of this regulation) of all emissions units (as defined in Chapter 2 of this regulation) at the source, that emit or have the potential to emit the PAL pollutant.
- (B) "Allowable emissions" means "allowable emissions" as defined in Chapter 2 of this regulation, except as this definition is modified according to Reg. 31.802(B)(1) through (2) of this chapter.

- (1) 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.
- (2) An emissions unit's potential to emit shall be determined using the definition in Chapter 2 of this regulation, except that the words "or enforceable as a practical matter" should be added after "federally enforceable."
- (C) "*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 Chapter 2 of this regulation or in the Clean Air Act, whichever is lower.
- (D) *"Major emissions unit"* means:
  - (1) Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or
  - (2) 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 Clean Air Act for nonattainment areas. For example, in accordance with the definition of major stationary source in Section 182(c) of the Clean Air Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.
- (E) "*Plantwide applicability limitation (PAL)*" means an emission limitation expressed in tons per year, for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with Reg. 31.801 through Reg. 31.816 of this chapter.
- (F) "*PAL effective date*" means the date of issuance of the PAL 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.
- (G) "*PAL effective period*" means the period beginning with the PAL effective date and ending 10 years later.
- (H) "*PAL major modification*" means, notwithstanding the definitions for major modification and net emissions increase contained in Chapter 2 of this regulation, 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.
- (I) "*PAL permit*" means the major NSR permit, the minor NSR permit, or the State operating permit under a program that is approved into the plan, or the Title V permit issued by the reviewing authority that establishes a PAL for a major stationary source.
- (J) *"PAL pollutant"* means the pollutant for which a PAL is established at a major stationary source.

(K) "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 Chapter 2 of this regulation or in the Clean Air Act, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in Reg. 31.802(D) of this chapter.

#### **Reg. 31.803** Permit Application Requirements

As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the reviewing authority 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 or State 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.
- (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 Reg. 31.814(A) of this chapter.

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# Reg. 31.804 General Requirements for Establishing PALs

- (A) The plan allows the reviewing authority to establish a PAL at a major stationary source, provided that at a minimum, the requirements in Reg. 31.804(A)(1) through (7) of this chapter are met.
  - (1) The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
  - (2) The PAL shall be established in a PAL permit that meets the public participation requirements in Reg. 31.805 of this chapter.
  - (3) The PAL permit shall contain all the requirements of Reg. 31.807 of this chapter.

- (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 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 Reg. 31.813 through Reg. 31.815 of this chapter 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 Reg. 31.405(B) through (K) of this regulation 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.

#### **Reg. 31.805** Public Participation Requirement for PALs

PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with Chapter 3 of this regulation. This includes the requirement that the reviewing authority provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The reviewing authority must address all material comments before taking final action on the permit.

#### **Reg. 31.806 Setting the 10-year Actuals PAL Level**

Except as provided in Reg. 31.806(B) of this chapter, the plan shall provide that the (A) actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in Chapter 2 of this regulation) 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 Chapter 2 of this regulation or under the Clean Air 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 reviewing authority shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the reviewing authority is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NOx to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).

(B) For newly constructed units (which do 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 Reg. 31.806(A) of this chapter, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.

## **Reg. 31.807** Contents of the PAL Permit

Any PAL permit issued under this chapter shall contain the following information:

- (A) The PAL pollutant and the applicable source-wide emission limitation in tons per year.
- (B) The PAL permit effective date and the expiration date of the PAL (PAL effective period).
- (C) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with Reg. 31.811 of this chapter before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the reviewing authority.
- (D) A requirement that emission calculations for compliance purposes include emissions from startups, shutdowns and malfunctions.
- (E) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of Reg. 31.810 of this chapter.
- (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 for each month as required by Reg. 31.814(A) of this chapter.
- (G) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under Reg. 31.813 of this chapter.
- (H) A requirement to retain the records required under Reg. 31.814 of this chapter on site. Such records may be retained in an electronic format.
- (I) A requirement to submit the reports required under Reg. 31.815 of this chapter by the required deadlines.
- (J) Any other requirements that the reviewing authority deems necessary to implement and enforce the PAL.

#### **Reg. 31.808** Reopening of the PAL Permit

- (A) During the PAL effective period, the PAL permit shall be reopened to:
  - (1) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL.

- (2) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under Reg. 31.405(B) through (K) of this regulation.
- (3) Revise the PAL to reflect an increase in the PAL as provided under Reg. 31.812 of this chapter.
- (B) The PAL permit may be reopened to:
  - (1) Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date.
  - (2) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the State may impose on the major stationary source under the plan.
  - (3) Reduce the PAL if the reviewing authority determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related 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.
- (C) Except for the permit reopening in Reg. 31.808(A)(1) of this chapter for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of Reg. 31.805 of this chapter.

## Reg. 31.809 PAL Effective Period

A PAL shall have an effective period of 10 years.

## **Reg. 31.810** Expiration of a PAL

Any PAL which is not renewed in accordance with the procedures in Reg. 31.811 of this chapter shall expire at the end of the PAL effective period, and the requirements in Reg. 31.810(A) through (E) of this chapter 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 permit established according to the procedures in Reg. 31.810(A)(1) through (2) of this chapter.
  - (1) Within the time frame specified for PAL renewals in Reg. 31.811(B) of this chapter, 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 reviewing authority) by distributing the PAL allowable emissions for the 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 Reg. 31.811(E) of this chapter, such distribution shall be made as if the PAL had been adjusted.

- (2) The reviewing authority shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the reviewing authority determines is appropriate.
- (B) Each emissions unit(s) shall comply with the allowable emission limitation on a 12month rolling basis. The reviewing authority may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS or CPMS to demonstrate compliance with the allowable emission limitation.
- (C) Until the reviewing authority issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under Reg. 31.810(A)(1) of this chapter, 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 or change in the method of operation at the major stationary source will be subject to the nonattainment major NSR requirements if such change meets the definition of major modification in Chapter 2 of this regulation.
- (E) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to Reg. 31.406 of this regulation, but were eliminated by the PAL in accordance with the provisions in Reg. 31.801(C)(3) of this chapter.

# Reg. 31.811 Renewal of a PAL

- (A) The reviewing authority shall follow the procedures specified in Reg. 31.805 of this chapter in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the reviewing authority.
- (B) Application deadline.

A major stationary source owner or operator shall submit a timely application to the reviewing authority to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. 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 within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.

(C) Application requirements.

The application to renew a PAL permit shall contain the information required in Reg. 31.811(C)(1) through (4) of this chapter.

- (1) The information required in Reg. 31.803(A) through (C) of this chapter.
- (2) A proposed PAL level.
- (3) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
- (4) Any other information the owner or operator wishes the reviewing authority to consider in determining the appropriate level for renewing the PAL.
- (D) PAL adjustment.

In determining whether and how to adjust the PAL, the reviewing authority shall consider the options outlined in Reg. 31.811(D)(1) and (2) of this chapter. However, in no case may any such adjustment fail to comply with Reg. 31.811(D)(3) of this chapter.

- If the emissions level calculated in accordance with Reg. 31.806 of this chapter is equal to or greater than 80 percent of the PAL level, the reviewing authority may renew the PAL at the same level without considering the factors set forth in Reg. 31.811(D)(2) of this chapter; or
- (2) The reviewing authority may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the reviewing authority in its written rationale.
- (3) Notwithstanding Reg. 31.811(D)(1) and (2) of this chapter,
  - (a) If the potential to emit of the major stationary source is less than the PAL, the reviewing authority shall adjust the PAL to a level no greater than the potential to emit of the source; and
  - (b) The reviewing authority shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of Reg. 31.812 of this chapter (increasing a PAL).
- (E) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the reviewing authority has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or Title V permit renewal, whichever occurs first.

#### Reg. 31.812 Increasing a PAL During the PAL Effective Period

- (A) The reviewing authority may increase a PAL emission limitation only if the major stationary source complies with the provisions in Reg. 31.812(A)(1) through (4) of this chapter.
  - (1) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. 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 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 a major NSR permit for all emissions unit(s) identified in Reg. 31.812(A)(1) of this chapter, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the nonattainment major NSR program process (for example, LAER), even though they have also become subject to the PAL or continue to be subject to the PAL.
  - (4) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- (B) The reviewing authority 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 Reg. 31.812(A)(2)), plus the sum of the baseline actual emissions of the small emissions units.
- (C) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of Reg. 31.805 of this chapter.

#### **Reg. 31.813 Monitoring Requirements for PALs**

(A) General Requirements.

- (1) Each PAL permit must contain 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 permit 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 permit.
- (2) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in Reg. 31.813(B)(1) through (4) of this chapter and must be approved by the reviewing authority.
- (3) Notwithstanding Reg. 31.813(A)(2) of this chapter, an owner or operator may also employ an alternative monitoring approach that meets Reg. 31.813(A)(1) of this chapter if approved by the reviewing authority.
- (4) Failure to use a monitoring system that meets the requirements of this chapter 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 Reg. 31.813(C) through (I) of this chapter:

- (1) Mass balance calculations for activities using coatings or solvents;
- $(2) \quad CEMS;$
- (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 coating or solvents shall meet the following requirements:

(1) 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 reviewing authority 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) CEMS must comply with applicable Performance Specifications found in 40 CFR Part 60, appendix B; and
- (2) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
- (E) CPMS or PEMS.

An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

- (1) The CPMS or the 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 15 minutes, or at another less frequent interval approved by the reviewing authority, 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:

- (1) 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 6

months of PAL permit issuance, unless the reviewing authority 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 PAL permit.
- (H) Notwithstanding the requirements in Reg. 31.813(C) through (G) of this chapter, 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 reviewing authority shall, at the time of permit issuance:
  - (1) 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) Re-validation.

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All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the reviewing authority. Such testing must occur at least once every 5 years after issuance of the PAL.

## Reg. 31.814 Recordkeeping Requirements

- (A) An owner or operator shall retain a copy of all records necessary to determine compliance with any requirement of this chapter and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.
- (B) An owner or operator shall retain a copy of the following records for the duration of the PAL effective period plus 5 years:
  - (1) A copy of the PAL permit application and any applications for revisions to the PAL; and
  - (2) Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance.

## **Reg. 31.815** Reporting and Notification Requirements

The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the reviewing authority in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in Reg. 31.815(A) through (C).

# (A) Semi-Annual Report.

The semi-annual report shall be submitted to the reviewing authority within 30 days of the end of each reporting period. This report shall contain the information required in Reg. 31.815(A)(1) through (7) of this chapter.

- (1) The identification of owner and operator and the permit number.
- (2) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to Reg. 31.814(A) of this chapter.
- (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, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by Reg. 31.813(G) of this chapter.
- (7) A signed statement by the responsible official (as defined by the applicable Title V operating permit program) 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 requirements, including periods where no monitoring is available. A report submitted pursuant to 26.701(C)(3)(b) of Arkansas Pollution Control and Ecology Commission, Regulation 26 shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by 26.701(C)(3)(a) of Regulation 26. The reports shall contain the following information:

- (1) The identification of owner and operator and the permit number;
- (2) 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 (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (C) Re-validation results.

The owner or operator shall submit to the reviewing authority the results of any revalidation test or method within 3 months after completion of such test or method.

#### **Reg. 31.816 Transition Requirements**

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- (A) The reviewing authority may supersede any PAL which was established prior to the date of approval of this regulation with a PAL that complies with the requirements of Reg. 31.801 through Reg. 31.816 of this chapter.
- (B) No reviewing authority may issue a PAL that does not comply with the requirements of Reg. 31.801 through Reg. 31.816 of this chapter after the Administrator has approved regulations incorporating these requirements into a plan.

# **CHAPTER 9: EFFECTIVE DATE**

# **Reg. 31.901 Effective Date**

This chapter is effective ten (10) days after filing with the Secretary of State, the State Library and the Bureau of Legislative Research.

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