



APA-2  
11/96

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
AIR DIVISION**

**NOTICE OF INTENDED ACTION**

**AGENCY NAME:** Environmental Management

**RULE NO. & TITLE:** 335-3-14-.04 -Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration Permitting (PSD)] (Amend)

**INTENDED ACTION:** Revise Division 3 of the ADEM Administrative Code with the amendment of Rules 335-3-14-.04 (Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration Permitting (PSD)]).

**SUBSTANCE OF PROPOSED ACTION:**

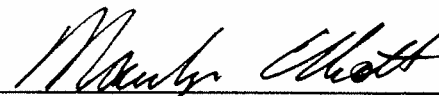
Revisions to the Division 3 Code are being proposed to amend Rule 335-3-14-.04 to include the federal definition and requirements for regulation of replacement emission units. Chapter 335-3-14 is considered as a part of the federally enforceable State Implementation Plan (SIP). As such, any revisions to this Chapter/Rule are proposed to be incorporated into Alabama's SIP.

**TIME, PLACE, MANNER OF PRESENTING VIEWS:**

Comments may be submitted in writing or orally at a public hearing to be held 10:00 a.m., February 8, 2012, in the ADEM Hearing Room, 1400 Coliseum Blvd., Montgomery, Alabama 36110.

**FINAL DATE FOR COMMENT AND COMPLETION OF NOTICE:** February 10, 2012

**CONTACT PERSON AT AGENCY:** Chris Howard (334) 271-7878



Lance R. LeFleur  
Director

**335-3-14-.04 Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration Permitting (PSD)]**

(1) Applicability.

(a) The requirements of this rule apply to the construction of any new major stationary source (as defined in subparagraph (2)(a) of this rule) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the Clean Air Act.

(b) The requirements of paragraphs (9) through (17) of this rule apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this rule otherwise provides.

(c) No new major stationary source or major modification to which the requirements of paragraphs (9) through (17)(c) of this rule apply shall begin construction without a permit that states that the major stationary source or major modification will meet those requirements.

(d) Except as otherwise provided in subparagraph (1)(j) of this rule, and consistent with the definition of major modification contained in subparagraph (2)(b) of this rule, a project is a major modification for a regulated NSR pollutant only if it causes two types of emissions increases – a significant emissions increase [as defined in subparagraph (2)(mm) of this rule], and a significant net emissions increase [as defined in subparagraphs (2)(c) and (2)(w) of this rule].

(e) Before beginning actual construction, the procedure for calculating whether a significant emissions increase will occur depends upon the type of emissions units being modified, according to subparagraphs (1)(f) through (i) of this rule. The procedure for calculating whether a significant net emissions increase will occur at the major stationary source is contained in the definition in subparagraph (2)(c) of this rule. Regardless of any such preconstruction projections, a major modification can result only if the project causes a significant emissions increase and a significant net emissions increase.

(f) 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(s) between the projected actual emissions [as defined in subparagraph (2)(nn) of this rule] and the baseline actual emissions [as defined in subparagraphs (2)(uu) 1. and 2. of this rule], for each existing emissions unit, equals or exceeds the significant rate for that pollutant [as defined in subparagraph (2)(w) of this rule].

(g) 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 subparagraph (2)(d) of this rule] from each new emissions unit following completion of the project and the baseline actual emissions [as defined in subparagraph (2)(uu)3. of this rule] of these units before the project equals or exceeds the significant rate for that pollutant [as defined in subparagraph (2)(w) of this rule].

(h) Actual-to-potential 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(s) between the potential to emit [as defined in subparagraph (2)(d) of this rule] and the actual emissions [as defined in subparagraph (2)(u) of this rule], for each existing emissions unit, equals or exceeds the significant rate for that pollutant [as defined in subparagraph (2)(w) of this rule].

(i) Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in subparagraphs (1)(f) through (h) of this rule as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant rate for that pollutant [as defined in subparagraph (2)(w) of this rule].

(j) Any major stationary source subject to a plantwide applicability limit (PAL), as defined in subparagraph (23)(b)5. of this rule, for a regulated NSR pollutant shall comply with the requirements under paragraph (23) of this rule.

(k) Greenhouse gases (GHGs).

1. Prior to January 2, 2011, GHGs, as defined in Subparagraph (2)(zz) of this Rule, shall not be considered a regulated NSR pollutant.

2. During the period of January 2, 2011 to June 30, 2011, GHGs shall only be considered regulated NSR pollutants if:

(i) The stationary source is a new major stationary source for a regulated NSR pollutant other than GHGs, and the source will have the potential to emit GHGs at a rate of 75,000 TPY CO<sub>2</sub>e or more, or

(ii) The stationary source is an existing major stationary source for a regulated NSR pollutant other than GHGs, the source is making a major modification which will result in a significant net emissions increase of a regulated NSR pollutant other than GHGs, the source is making a modification which will result in a net increase in GHGs (total mass basis), and the source is making a modification which will result in a net emissions increase of GHGs greater than 75,000 TPY CO<sub>2</sub>e.

3. Beginning July 1, 2011, the applicability of this rule with respect to GHGs shall be as listed in paragraphs (1)(a) through (j).

(2) Definitions. For the purposes of this rule only, the following terms will have meanings ascribed in this paragraph:

(a) "Major Stationary Source" shall mean:

1. Any of the following stationary sources [see subparagraph (e) of this paragraph] of air pollutants which emits, or has the potential to emit [see subparagraph (d) of this paragraph], 100 tons per year or more of any regulated NSR pollutant:

- carbon black plants (furnace process);
- charcoal production plants;
- chemical process plants;
- coal cleaning plants (with thermal dryers);
- coke oven batteries;
- fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
- fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input;
- fuel conversion plants;
- glass fiber processing plants; and
- hydrofluoric acid plants;
- sulfuric acid plants;
- nitric acid plants;
- iron and steel mill plants;
- kraft pulp mills;
- lime plants;
- municipal incinerators capable of charging more than 250 tons of refuse per day;
- petroleum refineries;
- petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- phosphate rock processing plants;
- portland cement plants;
- primary aluminum ore reduction plants;
- primary copper smelters;
- primary lead smelters;
- primary zinc smelters;
- secondary metal production plants;
- sintering plants;
- sulfur recovery plants;
- taconite ore processing plants;

(i) Notwithstanding the stationary source size specified in subparagraph (a)1. of this paragraph, any stationary source which emits, or has the potential to emit, 250 tons per year or more of any regulated NSR pollutant;

(ii) Any physical change that would occur at a stationary source not otherwise qualifying under this rule as a major stationary source, if the changes would constitute a major stationary source by itself; or

(iii) For GHGs, any stationary source which emits or has the potential to emit:

(I) GHGs on a total mass rate in accordance with either subparagraph (2)(a)1. or (2)(a)1.(i), and

(II) GHGs of 100,000 tons per year or more CO<sub>2</sub>e.

2. A stationary source that is considered major for VOC or NO<sub>x</sub> shall be considered major for ozone.

(b) "Major Modification" shall mean any physical change in or change in the method of operation of a major stationary source that would result in a significant [see subparagraph (w) of this paragraph] net emissions increase [see subparagraph (c) of this paragraph] of any regulated NSR pollutant.

1. Any net emissions increase that is significant for VOC or NO<sub>x</sub> shall be considered significant for ozone.

2. Any net emissions increase that is significant for SO<sub>2</sub> or NO<sub>x</sub> shall be considered significant for PM<sub>2.5</sub>.

3. A physical change or change in the method of operation shall not include:

(i) Routine maintenance, repair and replacement;

(ii) 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 (P.L. 93-319, 15 U.S.C. 791 note) or any superseding legislation, or by reason of a natural gas curtailment plan pursuant to the Federal Power Act (June 10, 1920, P.L. 280, 16 U.S.C. 791a);

(iii) Use of an alternative fuel by reason of an order or rule under Section 125 of the CAA;

(iv) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(v) Use of an alternative fuel or raw material by a stationary source which:

(I) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any enforceable permit condition which was established after January 6, 1975.

(II) The source is approved to use under any permit issued under the Federal Prevention of Significant Deterioration ("PSD") regulations (40 CFR 52.21) or under regulations of this rule;

(vi) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any enforceable permit condition which was established after January 6, 1975.

(vii) Any change in ownership at a stationary source.

(viii) Reserved.

(ix) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(x) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated NSR pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

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 paragraph (23) of this rule for a PAL for that pollutant. Instead, the definition at subparagraph (23)(b)8. of this rule shall apply.

(c) "Net Emissions Increase" shall mean with respect to any regulated NSR pollutant, the amount by which the sum of the following exceeds zero:

1. Any increase in emissions as calculated pursuant to subparagraph (1)(e) through (i) of this rule from a particular physical change or change in method of operation at a stationary source; and

2. Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subparagraph shall be determined as provided in subparagraph (2)(uu) of this rule, except that subparagraphs (2)(uu)1.(iii) and (2)(uu)2.(iv) of this rule shall not apply.

(i) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

(I) The date five (5) years before construction [see subparagraph (h) of this paragraph] on the particular change commences [see subparagraph (i) of this paragraph]; and

(II) The date that the increase from the particular change occurs.

(ii) An increase or decrease in actual emissions is creditable only if the Director has not relied on it in issuing a permit for the source under this rule, which is in effect when the increase in actual emissions from the particular change occurs.

(iii) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides which occurs before the applicable minor source baseline date [see subparagraph (n)2. of this paragraph] is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available. With respect to particulate matter, only PM<sub>10</sub> and PM<sub>2.5</sub> emissions can be used to evaluate the net emissions increase for PM<sub>10</sub>. Only PM<sub>2.5</sub> emissions can be used to evaluate the net emissions increase for PM<sub>2.5</sub>.

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

(v) A decrease in actual emissions is creditable only to the extent that:

(I) The old level of actual emissions or the old level of allowable emissions [see subparagraph (p) of this paragraph], whichever is lower, exceeds the new level of actual emissions;

(II) It is enforceable [see subparagraph (q) of this paragraph], at and after the time that actual construction on the particular change begins; and

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

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

(d) "Potential to Emit" shall mean the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions [see paragraph 335-3-14-.04(2)(r)] do not count in determining the potential to emit of a stationary source.



(e) "Stationary Source" shall mean any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.

(f) "Building, Structure, Facility, or Installation" shall mean all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., all have the same two digit code) as described in the Standard Industrial Classification Manual.

(g) "Emissions Unit" shall mean any part of a stationary source which emits or would have the potential to emit any regulated NSR pollutant including an electric utility steam generating unit as defined in subparagraph (2)(vv) of this rule. For purposes of this rule, there are two types of emissions units as described in subparagraphs (2)(g)1. and 2. of this rule.

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

2. An existing emissions unit is any emissions unit that does not meet the requirements in subparagraph (2)(g)1. of this rule. A replacement unit, as defined in subparagraph (bbb) of this rule, is an existing emissions unit.

(h) "Construction" shall mean any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in emissions.

(i) "Commence" as applied to construction of a major stationary source or major modification shall mean that the owner or operator has all necessary preconstruction approvals or permits [see subparagraph (j) of this paragraph] and either has:

1. Begun, or caused to begin, a continuous program of actual on-site construction [see subparagraph (k) of this paragraph] 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.

(j) "Necessary Preconstruction Approvals or Permits" shall mean those permits or approvals required under Alabama air quality control laws and regulations which are part of the State Implementation Plan.

(k) "Begin Actual Construction" shall mean, 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 underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(l) "Best Available Control Technology (BACT)" shall mean an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the Director, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR 60 and 61. If the Director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof may be prescribed instead to satisfy the requirement for the application of 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.

(m) "Baseline Concentration" shall mean that ambient concentration level which exists in the baseline area [see subparagraph (o) of this paragraph] at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

1. The actual emissions, as defined in paragraph (2)(u) of this rule, representative of sources in existence on the applicable minor source baseline date, except as provided in subparagraph (m) 3. of this paragraph;

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

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

(i) Actual emissions, as defined in paragraph (2)(u) of this rule, from any major stationary source on which construction commenced after the major source baseline date; and

(ii) Actual emissions increases and decreases, as defined in paragraph (2)(u) of this rule, at any stationary source occurring after the minor source baseline date.

(n) "Major Source Baseline Date" means in the case of particulate matter less than 10 microns in diameter and sulfur dioxide, January 6, 1975; in the case of nitrogen dioxide, the major source baseline date is February 8, 1988, and in the case of particulate matter less than 2.5 microns in diameter, the major source baseline date is October 20, 2010.

1. "Minor Source Baseline Date" means the earliest date after the trigger date on which the first complete [see subparagraph (v) of this paragraph], application is submitted by a major stationary source or major modification subject to the requirements of Federal PSD regulations or this rule. The trigger date is:

(i) In the case of particulate matter less than 10 microns in diameter and sulfur oxides, August 7, 1977, and

(ii) In the case of nitrogen dioxide, February 8, 1988.

(iii) In the case of particulate matter less than 2.5 microns in diameter, October 20, 2011.

2. The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:

(i) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under Section 107(d)(1)(A)(ii) or (iii) of the CAA for the pollutant on the date of its complete application under Federal PSD regulations or this rule.

(ii) In the case of a major stationary source, the pollutant would be emitted in significant amounts or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

3. Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM<sub>10</sub> increments.

(o) "Baseline Area" shall mean any intrastate area (and every part thereof) designated as attainment or unclassifiable under Section 107(d)(1)(A)(ii) or (iii) of the CAA in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than one (1) microgram per cubic meter (annual average) of the pollutant for which the minor source baseline date is established.

1. Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM<sub>10</sub> increments.

(p) "Allowable Emissions" shall mean the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the

source is subject to enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

1. The applicable standards as set forth in 40 CFR 60, 61, and 63;
2. The applicable State Implementation Plan emissions limitation, including those with a future compliance date; or
3. The emissions rate specified as an enforceable permit condition, including those with a future compliance date.

(q) "Enforceable" shall mean all limitations and conditions which are enforceable, including those requirements developed pursuant to 40 CFR 60, 61, and 63, requirements within the State Implementation Plan and any permit requirements established pursuant to chapters 14, 15, or 16 of these regulations.

(r) "Secondary Emissions" shall mean 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 rule, 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 may include, but are not limited to:

1. Emissions from ships or trains coming to or from the new or modified stationary source; and
2. Emissions from any off-site support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.

(s) "Innovative Control Technology" shall mean any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.

(t) "Fugitive Emissions" shall mean those emissions which could not reasonably pass through a stack, chimney, vent, roof monitor, or other functionally equivalent opening.

(u) "Actual Emissions" shall mean the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with subparagraphs (u)1. through (u)3. below, except that this definition shall not apply for establishing a PAL under paragraph (23) of this rule. Instead, subparagraphs (2)(nn) and (2)(uu) of this rule shall apply for this purpose.

1. In general, actual emissions as of any given 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 given data and which is representative of normal source operation. The Director shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

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

3. For any emissions unit which has not begun normal operations on the given date as determined in subparagraph (u)1., actual emissions shall equal the potential to emit of the unit on that date.

(v) "Complete" shall mean, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

(w) "Significant" shall mean, 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:

<u>Pollutant</u>	<b>Emissions Rate (tons per year)</b>
Carbon monoxide .....	100
Nitrogen oxides.....	40
Sulfur dioxide .....	40
Particulate matter.....	25
PM <sub>10</sub> .....	15
PM <sub>2.5</sub> .....	10 (of direct PM <sub>2.5</sub> )
	40 (of SO <sub>2</sub> or NO <sub>x</sub> )
Ozone .....	40 (of VOC or NO <sub>x</sub> )
Lead.....	0.6
Fluorides (excluding HF).....	3
Sulfuric acid mist .....	7
Hydrogen sulfide (H <sub>2</sub> S).....	10
Total reduced sulfur (including H <sub>2</sub> S).....	10
Reduced sulfur compounds (including H <sub>2</sub> S).....	10
Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans).....	3.5 x 10 <sup>-6</sup>
Municipal waste combustor metals (measured as	15

<b><u>Pollutant</u></b>	<b>Emissions Rate (tons per year)</b>
particulate matter) .....	
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride) .....	40
Municipal solid waste landfill emissions (measured as nonmethane organic compounds).....	50
Greenhouse gases (GHGs) CO <sub>2</sub> e.....	75,000

1. Significant means, in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that paragraph (2)(w) of this rule does not list: 100 TPY.

2. Notwithstanding subparagraph (w) above, significant shall mean any emissions rate or any net emissions increase, excluding GHGs, associated with a major stationary source or major modification which would construct within ten (10) kilometers of a Class I area and have an impact on such area equal to or greater than one (1) microgram per cubic meter (24-hour average).

3. For GHGs, a source or modification would not be significant unless it results in:

(i) An emissions increase and a net emissions increase in GHGs on a total mass basis, and

(ii) A significant emissions increase and a significant net emissions increase in GHGs on a CO<sub>2</sub>e basis.

(x) "Federal Land Manager" shall mean, with respect to any lands in the United States, the Secretary of the Department with authority over such lands.

(y) "High Terrain" shall mean any area having an elevation 900 feet or more above the base of the stack of a source.

(z) "Low Terrain" shall mean any area other than high terrain.

(aa) "Indian Governing Body" shall mean the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(bb) "Indian Reservation" shall mean any Federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(cc) "Adverse Impact on Visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent,

intensity, duration, frequency and time of visibility impairments, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.

(dd) "Visibility Impairment" means any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions.

(ee) "Natural Conditions" includes naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast, or coloration.

(ff) "Environmentally Beneficial Activity" shall mean:

1. Any activity or project undertaken at an existing emissions unit which, as its primary purpose, reduces emissions of air pollutants from such unit, and is limited to the installation or modification of any of the following:

(i) Conventional or advanced flue gas desulfurization, or sorbent injection for SO<sub>2</sub>;

(ii) Electrostatic precipitators, baghouses, high efficiency multiclones, or scrubbers for particulate matter or other pollutants;

(iii) Flue gas recirculation, low-NO<sub>x</sub> burners, selective non-catalytic reduction or selective catalytic reduction for NO<sub>x</sub>;

(iv) Regenerative thermal oxidizers, catalytic oxidizers, condensers, thermal incinerators, flares, carbon adsorbers, or combustion devices installed or modified to comply with hazardous emission standards for volatile organic compounds or hazardous air pollutants;

(v) Activities or projects undertaken to accommodate switching to an inherently less polluting fuel, including but not limited to natural gas or coal reburning, or the cofiring of natural gas and other inherently less polluting fuels, for the purpose of controlling emissions, and including any activity that is necessary to accommodate switching to an inherently less polluting fuel;

(vi) Pollution prevention projects which the Director determines to be environmentally beneficial.

(vii) Installation or modification of a technology other than those listed in subparagraphs (ff)1.(i) through (v), for the purposes set forth in subparagraph (ff)1., which has demonstrated an effectiveness at reducing emissions and is determined by the Director to be environmentally beneficial.

2. Environmentally beneficial projects do not include:

(i) The replacement of an existing emissions unit with a newer or different unit;

(ii) Reconstruction of an existing emissions unit;

(iii) Pollution prevention projects which result in an increased risk from the release of hazardous air pollutants;

(iv) Any project which would result in the increased production of an existing emissions unit.

(v) Any project which reduces emissions solely by transferring them to or from another media.

(vi) Any project which would cause an exceedance of an existing enforceable emissions limitation which was established to avoid applicability of the requirements of this rule.

(gg) "Pollution Prevention Projects" shall mean 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.

(hh) "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.

(ii) "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.

(jj) "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 plans 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.

(kk) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions



simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

1. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(ll) Reserved.

(mm) "Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in subparagraph (2)(w) of this rule) for that pollutant.

(nn) "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 (consecutive 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 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 subparagraph (2)(nn)1. of this rule (before beginning actual construction), the owner or operator of the major stationary source:

(i) 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 these regulations; and

(ii) Shall include fugitive emissions to the extent quantifiable and emissions associated with startups and shutdowns; and

(iii) 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 subparagraph (2)(uu) of this rule and that are not resulting from the particular project, including any increased utilization due to product demand growth; or

(iv) In lieu of using the method set out in subparagraphs (2)(nn)2.(i) through (iii), may elect to use the emissions unit's potential to emit, in tons per year, as defined under subparagraph (2)(d) of this rule.

(oo) Reserved.

(pp) "Prevention of Significant Deterioration (PSD) program" means the preconstruction permit program in this rule. Any permit issued under this program is a major NSR permit.

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

(rr) "Predictive emissions monitoring system (PEMS)" means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O<sub>2</sub> or CO<sub>2</sub> concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

(ss) "Continuous parameter monitoring system (CPMS)" means all of the equipment necessary to meet the data acquisition and availability requirements of this rule, 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<sub>2</sub> or CO<sub>2</sub> concentrations), and to record average operational parameter value(s) on a continuous basis.

(tt) "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).

(uu) "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with subparagraphs (2)(uu)1. through 4. of this rule.

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 Director may allow the use of a different time period upon a determination that it is more representative of normal source operation.

(i) The average rate shall include fugitive emissions to the extent quantifiable and emissions associated with startups and shutdowns.

(ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

(iii) 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.

(iv) 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 subparagraph (2)(uu)1.(ii) of this rule.

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 Department for a permit required under this rule, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.

(i) The average rate shall include fugitive emissions to the extent quantifiable and emissions associated with startups and shutdowns.

(ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.

(iii) 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 Administrator proposed or promulgated under 40 CFR part 63, 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 40 CFR § 51.165(a)(3)(ii)(G).

(iv) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

(v) 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 subparagraphs (2)(uu)2.(ii) and (iii) of this rule.

3. For a new emissions unit, as defined in subparagraph (2)(g)1. of this rule, 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. During the first two years from the date which the emissions unit commenced operation, the baseline actual emissions shall equal the potential to emit for the unit. Thereafter, the unit will be considered an existing emissions unit and the baseline actual emissions will be determined in accordance with subparagraph (2)(uu)1. for an electric steam generating unit or subparagraph (2)(uu)2. for other emissions units.

4. For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in subparagraph (2)(uu)1. of this rule, for other existing emissions units in accordance with the procedures contained in subparagraph (2)(uu)2. of this rule, and for a new emissions unit in accordance with the procedures contained in subparagraph (2)(uu)3. of this rule.

(vv) 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.

(ww) "Regulated NSR pollutant", for purposes of this rule, means the following:

1. Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator of EPA (e.g., volatile organic compounds and NO<sub>x</sub> are precursors for ozone);

2. Any pollutant that is subject to any standard promulgated under section 111 of the Clean Air Act;

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

4. Any pollutant that otherwise is subject to regulation under the Clean Air Act; except that any or all hazardous air pollutants either listed in section 112 of the Clean Air Act, including compounds listed in 40 CFR Part 68 pursuant to Section 112(r) of the Clean Air Act, or added to the list pursuant to section 112(b)(2) of the Clean Air Act, which have not been delisted pursuant to section 112(b)(3) of the Clean Air Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Clean Air Act.

5. Particulate matter (PM), PM<sub>2.5</sub> and PM<sub>10</sub> emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. Such condensable particulate matter shall be

accounted for in applicability determinations and in establishing emissions limitations for PM, PM<sub>2.5</sub> and PM<sub>10</sub>. Applicability determinations made prior to January 1, 2011 without accounting for condensable particulate matter shall not be considered invalid.

(xx) Reserved.

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

(zz) Greenhouse gases (GHGs) means the aggregate of: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

(aaa) CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) shall represent the amount of GHGs emitted as computed by the following:

1. Multiplying the mass amount of emissions (TPY) for each of the six greenhouse gases in the pollutant GHGs by the gas's associated global warming potential as listed in Appendix I.

2. Sum the resultant value determined in subparagraph (aaa)1. for each gas to calculate the TPY of CO<sub>2</sub>e.

(bbb) Replacement unit means an emissions unit for which all the criteria listed in subparagraphs (2)(bbb)1. through 4. of this section are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced. A replacement unit is subject to all permitting requirements for modifications under this rule.

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. A functionally equivalent unit would be a unit that serves the same purpose as the replaced unit. The Director shall be the determiner of whether a unit is functionally equivalent to the replaced unit.

3. The replacement does not alter the basic design parameters of the process unit. Basic design parameters shall include, but not be limited to, maximum hourly heat input, maximum hourly fuel utilization, or maximum hourly raw material feed, as appropriate. Basic design parameters of a replaced unit shall also include all source specific emission limits and/or monitoring requirements. The Director shall be the determiner of whether the basic design parameters of the replaced unit are altered.

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.

(3) Ambient Air Increments. In areas designated as Class I, II or III, increases in pollutant concentration over the baseline shall be limited to the following:

Area	Pollutant	Maximum Allowable Increase (micrograms per cubic meter)
Class I	PM <sub>10</sub> :	Annual arithmetic mean ..... 4
		24-hour maximum ..... 8
	PM <sub>2.5</sub>	Annual arithmetic mean ..... 1
		24-hour maximum ..... 2
	Sulfur dioxide:	Annual arithmetic mean ..... 2
		24-hour maximum ..... 5
		3-hour maximum ..... 25
	Nitrogen dioxide:	Annual arithmetic mean ..... 2.5
Class II	PM <sub>10</sub> :	Annual arithmetic mean ..... 17
		24-hour maximum ..... 30
	PM <sub>2.5</sub>	Annual arithmetic mean ..... 4
		24-hour maximum ..... 9
	Sulfur dioxide:	Annual arithmetic mean ..... 20
		24-hour maximum ..... 91
		3-hour maximum ..... 512
	Nitrogen dioxide:	Annual arithmetic mean ..... 25
Class III	PM <sub>10</sub> :	Annual arithmetic mean ..... 34
		24-hour maximum ..... 60
	PM <sub>2.5</sub>	Annual arithmetic mean ..... 8
		24-hour maximum ..... 18
	Sulfur dioxide:	Annual arithmetic mean ..... 40
		24-hour maximum ..... 182
		3-hour maximum ..... 700
	Nitrogen dioxide:	Annual arithmetic mean ..... 50

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

(4) Ambient Air Ceilings. No concentration of a pollutant shall exceed:

(a) The concentration permitted under the National Secondary Ambient Air Quality Standard, or

(b) The concentration permitted under the National Primary Ambient Air Quality Standard, whichever concentration is lowest for the pollutant for a period of exposure.

(5) Area Classifications.

(a) The following area, which was in existence on August 7, 1977, shall be a Class I area and may not be redesignated:

1. The Sipsey Wilderness Area, located in Franklin, Winston, and Lawrence counties, Alabama.

(b) Any other area is initially designated Class II:

(6) Exclusions from Increment Consumption.

(a) The following concentrations shall be excluded in determining compliance with a maximum allowable increase:

1. Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order;

2. Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

3. Concentrations of PM<sub>10</sub> attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources;

4. The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration; and

5. Concentrations attributable to the temporary increase in emissions of sulfur dioxide, PM<sub>10</sub>, or nitrogen oxides from stationary sources which are

affected by plan revisions approved by the EPA as being exempt from increment consumption.

(b) No exclusion of such concentrations shall apply for more than five (5) years after the effective date of the order to which subparagraph (a)1. of this paragraph or the plan to which subparagraph (a)2. of this paragraph refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall apply for more than five (5) years after the later of such effective dates.

(7) Reserved.

(8) Review of Major Stationary Sources and Major Modification - Source Applicability and Exemptions.

(a) No major stationary source or major modification shall begin actual construction unless, as a minimum, requirements contained in paragraphs (9) through (17) of this rule have been met.

(b) The requirements contained in paragraphs (9) through (17) shall apply to any major stationary source and any major modification with respect to each regulated NSR pollutant that it would emit, except as this rule would otherwise allow.

(c) The requirements contained in paragraphs (9) through (17) apply only to any major stationary source or major modification that would be constructed in an area designated as attainment or unclassified under Section 107(d)(1)(A)(ii) or (iii) of the CAA.

(d) The requirements contained in paragraphs (9) through (17) shall not apply to a major stationary source or major modification, if:

1. Reserved.
2. Reserved.
3. Reserved.
4. Reserved.
5. Reserved.
6. The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution; or
7. The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification, and the source does not belong to any of the following categories:



- (i) Coal cleaning plants (with thermal dryers);
- (ii) Kraft pulp mills;
- (iii) Portland cement plants;
- (iv) Primary zinc smelters;
- (v) Iron and steel mills;
- (vi) Primary aluminum ore reduction plants;
- (vii) Primary copper smelters;
- (viii) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (ix) Hydrofluoric, sulfuric or nitric acid plants;
- (x) Petroleum refineries;
- (xi) Lime plants;
- (xii) Phosphate rock processing plants;
- (xiii) Coke oven batteries;
- (xiv) Sulfur recovery plants;
- (xv) Carbon black plants (furnace process);
- (xvi) Primary lead smelters;
- (xvii) Fuel conversion plants;
- (xviii) Sintering plants;
- (xix) Secondary metal production plants;
- (xx) Chemical process plants;
- (xxi) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (xxiii) Taconite ore processing plants;
- (xxiv) Glass fiber processing plants;
- (xxv) Charcoal production plants;

(xxvi) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

(xxvii) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the CAA; or

8. The source is a portable stationary source which has previously received a permit under this rule; and

(i) The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary; and

(ii) The emissions from the source would not exceed its allowable emissions; and

(iii) The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and

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

(e) The requirements of paragraphs (9) through (17) of this rule 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 under Section 107 of the CAA.

(f) The requirements of paragraphs (10), (12), and (14) of this rule shall not apply to a major stationary source or major modification with respect to a particular pollutant if the allowable emissions of that pollutant from the source or the net emissions increase of that pollutant from the modification:

1. Would impact no Class I area and no area where an applicable increment is known to be violated, and

2. Would be temporary.

(g) The requirements of paragraphs (10), (12), and (14) of this rule as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of BACT would be less than 50 tons per year.

(h) The Director may exempt a stationary source or modification from the requirements of paragraph (12) of this rule with respect to monitoring for a particular pollutant if:

1. The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts which are less than the following amounts:

Carbon monoxide .....	575 $\mu\text{g}/\text{m}^3$ , 8-hour average;
Nitrogen dioxide .....	14 $\mu\text{g}/\text{m}^3$ , annual average;
PM <sub>10</sub> .....	10 $\mu\text{g}/\text{m}^3$ , 24-hour average;
PM <sub>2.5</sub> .....	4 $\mu\text{g}/\text{m}^3$ , 24-hour average;
Sulfur dioxide.....	13 $\mu\text{g}/\text{m}^3$ , 24-hour average;
Ozone; <sup>1</sup>	
Lead .....	0.1 $\mu\text{g}/\text{m}^3$ , 3-month average;
Fluorides.....	0.25 $\mu\text{g}/\text{m}^3$ , 24-hour average;
Total reduced sulfur.....	10 $\mu\text{g}/\text{m}^3$ , 1-hour average;
Hydrogen sulfide .....	0.2 $\mu\text{g}/\text{m}^3$ , 1-hour average;

or

2. The concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in subparagraph (h)1. of this paragraph, or the pollutant is not listed in subparagraph (h)1. of this paragraph; or

3. The owner or operator of the stationary source or modification submits an application under this rule that the Director determines is complete, except with respect to the requirements for monitoring PM<sub>10</sub> in paragraph (12) of this rule, on or before June 1, 1988. If a complete permit application is received after June 1, 1988, but not later than December 1, 1988, the requirements for PM<sub>10</sub> monitoring under paragraph (12) of this rule apply in that data shall have been gathered over at least the period from February 1, 1988 to the date the complete application is received, except that if the Director determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months) then the shorter period of data gathering will suffice to meet the requirements of paragraph (12) of this rule.

(i) Reserved.

(j) Reserved.

(k) At the discretion of the Director, the requirements for air quality monitoring of PM<sub>10</sub> in subparagraphs (12)(a)1. through 4. of this rule may not apply to a particular source or modification when the owner or operator of the source or modification submits an application for a permit under this rule on or before June 1, 1988 and the Director subsequently determines that the

---

<sup>1</sup>No de minimus air quality level is provided for ozone. However, any net increase of 100 tons per year or more of VOC or NO<sub>x</sub> subject to rule 335-3-14-.04 would be required to perform an ambient impact analysis including the gathering of ambient air quality data.

application as submitted before that date was complete, except with respect to the requirements for monitoring PM<sub>10</sub> in subparagraphs (12)(a)1. through 4.

(l) The requirements for air quality monitoring of PM<sub>10</sub> in subparagraphs (12)(a)2. and 4. and subparagraph (12)(c) shall apply to a particular source or modification if the owner or operator of the source of modification submits an application for permit under this rule after June 1, 1988 and no later than December 1, 1988. The data shall have been gathered over at least the period from February 1, 1988 to the date the application becomes otherwise complete in accordance with the provisions set forth under subparagraph (12)(a)8., except that if the Director determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that subparagraph (12)(a)3. requires shall have been gathered over that shorter period.

(m) Any project which is an environmentally beneficial project as defined in subparagraph (2)(ff) of this rule shall not be considered a major modification as defined in paragraph (2) of this rule and is exempt from all provisions of this rule except paragraphs (10), (11), (13), (15), and (16).

(n) The requirements of paragraphs (10), (11), (12), (14), and (15) of this Rule shall not apply with respect to GHGs for any major stationary source or major modification.

(9) Control Technology Review.

(a) A major stationary source or major modification shall meet each applicable emissions limitation under the State Implementation Plan and each applicable limitation standard and standard of performance under 40 CFR 60 and 61.

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

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

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

(10) Source Impact Analysis.

(a) Required Demonstration. The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases

from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

1. Any National Ambient Air Quality Standard in any air quality control region; or

2. Any applicable maximum allowable increase over the baseline concentration in any area.

(b) Significant Impact Levels. The demonstration required in subparagraph (10)(a) is deemed to have been made if the emissions increase for the new stationary source alone or from the modification alone would cause, in all areas, air quality impacts less than the following amounts:

<b>Pollutant</b>	<b>Averaging Time</b>	<b>Class I Significance Level</b>	<b>Class II Significance Level</b>
SO <sub>2</sub>	3 hour		25 µg/m <sup>3</sup>
	24 hour		5 µg/m <sup>3</sup>
	Annual		1 µg/m <sup>3</sup>
PM <sub>10</sub>	24 hour		5 µg/m <sup>3</sup>
	Annual		1 µg/m <sup>3</sup>
PM <sub>2.5</sub>	24 hour	0.07 µg/m <sup>3</sup>	1.2 µg/m <sup>3</sup>
	Annual	0.06 µg/m <sup>3</sup>	0.3 µg/m <sup>3</sup>
NO <sub>2</sub>	Annual		1 µg/m <sup>3</sup>
CO	1 hour		2,000 µg/m <sup>3</sup>
	8 hour		500 µg/m <sup>3</sup>

(11) Air Quality Models.

(a) All estimates of ambient concentrations required under this rule shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models". (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711)

(12) Air Quality Analysis.

(a) Preapplication Analysis.

1. Any application for a permit under this rule shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

(i) For the source, each pollutant that it would have the potential to emit in a significant amount;

(ii) For the modification, each pollutant for which it would result in a significant net emissions increase.

2. With respect to any such pollutant for which no NAAQS exists; the analysis shall contain such air quality monitoring data as the Director determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.

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

4. In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one (1) year and shall represent the year preceding receipt of the application, except that, if the Director determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one (1) year (but not to be less than four (4) months), the data that is required shall have been gathered over at least that shorter period.

5. Reserved.

6. The owner or operator of a proposed stationary source or modification of VOC who satisfies all conditions of rule 335-3-14-.05 may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under subparagraph (a) of this paragraph.

7. For any application that becomes complete, except as the requirements of subparagraphs (a)3. and 4. of this paragraph pertaining to PM<sub>10</sub>, after December 1, 1988 and no later than August 1, 1989 the data that subparagraph (a)3. of this paragraph requires shall have been gathered over at least the period from August 1, 1988 to the date the application becomes otherwise complete, except that if the Director determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than 4 months), the data that subparagraph (a)3. of this paragraph requires shall have been gathered over that shorter period.

8. With respect to any requirements for air quality monitoring of PM<sub>10</sub> under subparagraphs (8)(k) and (l) of this rule, the owner or operator of the source or modification shall use a monitoring method approved by the Director and shall estimate the ambient concentrations of PM<sub>10</sub> using the data collected by such approved monitoring method in accordance with estimating procedures approved by the Director.

(b) Post-construction Monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the Director determines is necessary to determine the impact for said source or modification may have, or is having, on air quality in any area.

(c) Operations of Monitoring Stations. The owner or operator of a major stationary source or major modification shall meet Federal monitoring quality assurance requirements during the operation of monitoring stations for purposes of satisfying this paragraph.

(d) Visibility Monitoring. The Director may require monitoring of visibility in any Federal Class I area near the proposed new stationary source or major modification for such purposes and by such means as the Director deems necessary and appropriate.

(13) Source Information. The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or to make any determination required under this rule.

(a) With respect to a source or modification to which rules 335-3-14-.04(9), 335-3-14-.04(10), 335-3-14-.04(12), and 335-3-14-.04(14) apply, such information shall include:

1. A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

2. A detailed schedule for construction of the source or modification;

3. A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates and any other information necessary to determine that BACT would be applied.

(b) Upon request of the Director, the owner or operator shall also provide information on:

1. The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

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

(14) Additional Impact Analyses.

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

(b) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the source or modification.

(15) Sources Impacting Federal Class I Areas - Additional Requirements.

(a) Notice to Federal Land Managers and to EPA. The Director shall provide notice of any permit application for a proposed major stationary source or major modification the emissions from which would affect a Class I area to EPA, the Federal Land Manager and the Federal official charged with direct responsibility for management of any lands within any such area. The Director shall provide such notice promptly after receiving the application. The Director shall also provide EPA, the Federal Land Manager and such Federal officials with notice of every action related to the consideration of such permit.

(b) The Director shall notify all affected Federal Land Managers within 30 days of receipt of an advance notification of any permit application for a proposed major stationary source or modification, the emissions from which may affect a Class I Area. The Director shall provide written notification to all affected Federal Land Managers within 30 days of receiving the permit application. At least 30 days prior to the publication of the notice for public comment on the application, the Director shall provide the Federal Land Manager with a copy of all information relevant to the permit application including an analysis provided by the source of the potential impact of the proposed source on visibility.

(c) Visibility analysis. The Director shall consider any analysis performed by the Federal Land Manager concerning visibility impairment if the analysis is received within 30 days of being provided the permit application information and analysis required by subparagraph (b) of this paragraph above. Where the Director finds that such an analysis does not demonstrate to the satisfaction of the Director that an adverse impact on visibility will result in the Federal Class I area, the Director must, in the notice of public comment on the permit application, either explain his decision or give notice as to where the explanation can be obtained.

(d) Denial - Impact on Air Quality Related Values. The Federal Land Manager of any such lands may demonstrate to the Director that the emissions from a proposed source or modification would have an adverse impact on the air quality related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or



modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Director concurs with such demonstration, then he shall not issue the permit.

(e) Class I Variances. The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and he so certifies, the Director may issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, PM<sub>2.5</sub>, PM<sub>10</sub>, and nitrogen oxides would not exceed the following maximum allowable increases over baseline concentration for such pollutants:

<b>Pollutant</b>	<b>Maximum Allowable Increase (micrograms per cubic meter)</b>
<b>PM<sub>10</sub></b>	Annual arithmetic mean ..... 17
	24-hour maximum ..... 30
<b>PM<sub>2.5</sub></b>	Annual arithmetic mean .....4
	24-hour maximum.....9
<b>Sulfur dioxide</b>	Annual arithmetic mean ..... 20
	24-hour maximum ..... 91
	3-hour maximum .....325
<b>Nitrogen dioxide</b>	Annual arithmetic mean ..... 25

provided that the applicable requirements of this rule are otherwise met.

(f) Sulfur Dioxide Variance by Governor with Federal Land Manager's Concurrence. The owner or operator of a proposed source or modification which cannot be approved under subparagraph (c) of this paragraph may demonstrate to the Governor that the source or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four (24) hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Director shall issue a permit to such source or modification pursuant to the requirements of paragraph (16) of this rule provided, that the applicable requirements of this rule are otherwise met.

(g) Variance by the Governor with the President's Concurrence. In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the Director shall issue a permit pursuant to the requirements of paragraph (16) of this rule provided, that the applicable requirements of this rule are otherwise met.

(h) Emission Limitations for Presidential or Gubernatorial Variance. In the case of a permit issued pursuant to subparagraphs (f) or (g) of this paragraph, the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of twenty-four (24) hours or less for more than eighteen (18) days, not necessarily consecutive, during any annual period:

Period of exposure	Maximum Allowable Increase (micrograms per cubic meter)	
	Terrain areas	
	Low	High
24-hour maximum	36	62
3-hour maximum	130	221

(16) Public Participation.

(a) After receipt of an application for an Air Permit or any addition to such application, the Director shall advise the applicant of any deficiency in the application or in the information submitted. In the event of such a deficiency, the date of receipt of the application shall be, for the purpose of this rule, the date on which the Director received all required information.

(b) Within one (1) year after receipt of a complete application, the Director shall make a final determination of the application. This involves performing the following actions in a timely manner:

1. Make a preliminary determination whether construction should be approved, approved with conditions or disapproved.

2. Make available in at least one location in each region in which the proposed source or modification would be constructed a copy of all materials the applicant submitted, a copy of the preliminary determination and a copy or

summary of other materials, if any, considered in making the preliminary determination.

3. Notify the public, by advertisement in a newspaper of general circulation in each region in which the proposed source or modification would be constructed, of the application, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and the opportunity for written public comment, as well as comment at a public hearing. Public comments will be accepted for at least 30 days from the date of initial publication.

4. Send a copy of the notice of public comment to the applicant, to EPA and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: any other State or local air pollution control agencies, the chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency and any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification.

5. Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations.

6. Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than ten (10) days after the close of the public comment period, the applicant may, as part of the public record, submit a written response to any comments submitted by the public. The Director shall consider the applicant's response in making a final decision. The Director shall make all comments available for public inspection in the same locations where the Director made available preconstruction information relating to the proposed source or modification.

7. Make a final determination whether construction should be approved, approved with conditions or disapproved pursuant to this rule.

8. Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Director made available preconstruction information and public comments relating to the source or modification.

(17) Source Obligation.

(a) An Air Permit authorizing construction shall become invalid if construction is not commenced within twenty-four (24) months after receipt of such approval, if construction is discontinued for a period of twenty-four (24) months or more, or if construction is not completed within a reasonable time.

The Director may extend the twenty-four (24) month period upon satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within twenty-four (24) months of the projected and approved commencement date.

(b) An Air Permit authorizing construction shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan and any other requirements under local, State or Federal law.

(c) 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 enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of paragraphs (9) through (17) of this rule shall apply to the source or modification as though construction had not yet commenced on the source or modification.

(d) The provisions of this subparagraph (17)(d) apply to projects at an existing emissions unit at a major stationary source (other than projects at a source with a PAL), that are not excluded from the definition of physical change or change in the method of operation, where there is not a reasonable possibility that the project is a part of a major modification and may result in a significant emissions increase and the owner or operator elects to use the method specified in subparagraphs (2)(nn)2.(i) through (iii) of this rule for calculating projected actual emissions.

1. Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(i) A description of the project;

(ii) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(iii) 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 subparagraph (2)(nn)2.(iii) of this rule and an explanation for why such amount was excluded, and any netting calculations, if applicable.

2. The owner or operator of the source shall make the information required to be documented and maintained pursuant to subparagraph (17)(d) of this rule available for review upon a request for inspection by the Department or the general public.

3. Nothing in this subparagraph shall be construed to exempt the owner or operator of such a unit from obtaining any minor source Air Permit in accordance with the requirements of this chapter.

(e) The provisions of this subparagraph (17)(e) apply to projects at an existing emissions unit at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility that a project that is not a part of a major modification, and that is not excluded from the definition of physical change or change in the method of operation, may result in a significant emissions increase and the owner or operator elects to use the method specified in subparagraphs (2)(nn)2.(i) through (iii) of this rule for calculating projected actual emissions.

1. Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(i) A description of the project;

(ii) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(iii) 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 subparagraph (2)(nn)2.(iii) of this rule and an explanation for why such amount was excluded, and any netting calculations, if applicable.

2. Before beginning actual construction, the owner or operator shall provide a copy of the information set out in subparagraph (17)(e)1. of this rule to the Director. Nothing in this subparagraph shall be construed to require the owner or operator of such a unit to obtain any determination from the Director before beginning actual construction; however, nothing in this subparagraph shall be construed to exempt the owner or operator of such a unit from obtaining any minor source Air Permit in accordance with the requirements of this chapter.

3. The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in subparagraph (17)(e)1.(ii) of this rule; 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.

4. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which records must be generated under subparagraph (17)(e)3. of this rule. The report shall contain the following:

(i) All information required by subparagraph (17)(e)1. of this rule.

(ii) The name, address and telephone number of the major stationary source;

(iii) The annual emissions as calculated pursuant to subparagraph (17)(e)3. of this rule; and

(iv) Any other information that the owner or operator wishes to include in the report.

5. The owner or operator of the source shall make the information required to be documented and maintained pursuant to subparagraph (17)(e) of this rule available for review upon a request for inspection by the Department.

6. All information submitted to the Department pursuant to the requirements of subparagraph (17)(e) of this rule shall be available for review at the request of any member of the public in accordance with the Department's public records review procedures found in ADEM Admin. Code r. 335-1-1-.06.

(18) Innovative Control Technology.

(a) An owner or operator of a proposed major stationary source or major modification may request the Director in writing no later than the close of the comment period under paragraph (16) of this rule to approve a system of innovative control technology.

(b) The Director shall determine that the source or modification may employ a system of innovative control technology, if:

1. The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare or safety in its operation or function;

2. The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under subparagraph (9)(b) of this rule by a date specified by the Director. Such date shall not be later than four (4) years from the time of startup or seven (7) years from permit issuance;

3. The source or modification would meet the requirements of paragraphs (9) and (10) of this rule based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the Director;

4. The source or modification would not before the date specified by the Director:

(i) Cause or contribute to a violation of an applicable National Ambient Air Quality Standard; or

(ii) Impact any Class I area; or

(iii) Impact any area where an applicable increment is known to be violated; and

5. The consent of the Governor of any other affected state is secured;

6. All other applicable requirements including those for public participation have been met.

(c) The Director shall withdraw any approval to employ a system of innovative control technology made under this rule, if:

1. The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or

2. The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare or safety; or

3. The Director decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare or safety.

(d) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with subparagraph (c) of this paragraph, the Director may allow the source or modification up to an additional three (3) years to meet the requirement for the application of BACT through use of a demonstrated system of control.

(19) Permit Rescission.

(a) Any owner or operator of a stationary source or modification who holds a permit for the source or modification which was issued under this rule as in effect on July 30, 1987 or any earlier version of this rule, may request that the Director rescind the permit or a particular portion of the permit.

(b) The Director shall grant an application for rescission if the application shows that this rule would not apply to the source or modification.

(c) If the Director rescinds a permit under this rule, the public shall be given adequate notice of the rescission. Publication of an announcement of rescission in a newspaper of general circulation in the affected region within sixty (60) days of the rescission shall be considered adequate notice.

(20) Reserved.

(21) Reserved.

(22) Reserved.

(23) Actuals PALs. The provisions in subparagraphs (23)(a) through (o) of this rule govern actuals PALs.

(a) Applicability.

1. The Director may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in subparagraphs (23)(a) through (o) of this rule. The term "PAL" shall mean "actuals PAL" throughout paragraph (23) of this rule.

2. 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 subparagraphs (23)(a) through (o) of this rule, and complies with the PAL permit:

- (i) Is not a major modification for the PAL pollutant;
- (ii) Does not have to be approved through the PSD program;

3. 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.

(b) Definitions. For the purposes of this rule, the definitions in subparagraphs (23)(b)1. through 11. of this rule apply. When a term is not defined in these paragraphs, it shall have the meaning given in paragraph (2) of this rule or in the Clean Air Act.

1. "Actuals PAL" for a major stationary source means a PAL based on the baseline actual emissions (as defined in subparagraph (2)(uu) of this rule) of all emissions units (as defined in subparagraph (2)(g) of this rule) at the source, that emit or have the potential to emit the PAL pollutant.

2. "Allowable emissions" means "allowable emissions" as defined in subparagraph (2)(p) of this rule, except as this definition is modified according to subparagraphs (23)(b)2.(i) and (ii) of this rule.

(i) 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.

(ii) An emissions unit's potential to emit shall be determined using the definition in subparagraph (2)(d) of this rule, except that the words "or enforceable as a practical matter" should be added after "enforceable."

3. "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 subparagraph (2)(w) of this rule or in the Clean Air Act, whichever is lower.

4. "Major emissions unit" means:

(i) 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.



5. "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 subparagraphs (23)(a) through (o) of this rule.

6. "PAL effective date" generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

7. "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.

8. "PAL major modification" means, notwithstanding subparagraphs (2)(b) and (2)(c) of this rule (the definitions for major modification and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

9. "PAL permit" means the major NSR permit, the minor NSR permit, or the title V permit issued by the Director that establishes a PAL for a major stationary source.

10. "PAL pollutant" means the pollutant for which a PAL is established at a major stationary source.

11. "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 subparagraph (2)(w) of this rule 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 subparagraph (23)(b)4. of this rule.

(c) 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 Director for approval:

1. 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.

2. 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 and shutdown.

3. 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 subparagraph (23)(m)1. of this rule.

(d) General requirements for establishing PALs.

1. The Director is allowed to establish a PAL at a major stationary source, provided that at a minimum, the requirements in subparagraphs (23)(d)1.(i) through (vii) of this rule are met.

(i) 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 total, 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.

(ii) The PAL shall be established in a PAL permit that meets the public participation requirements in subparagraph (23)(e) of this rule.

(iii) The PAL permit shall contain all the requirements of subparagraph (23)(g) of this rule.

(iv) 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.

(v) Each PAL shall regulate emissions of only one pollutant.

(vi) Each PAL shall have a PAL effective period of 10 years.

(vii) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in subparagraphs (23)(l) through (n) of this rule for each emissions unit under the PAL through the PAL effective period.

2. At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under rule 335-3-14-.05 of this chapter 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.

(e) Public participation requirements for PALs. PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with those of this rule and 40 CFR Parts 51.160 and 51.161. This includes the requirement that the Director 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 Director must address all material comments before taking final action on the permit.

(f) Setting the 10-year actuals PAL level. The actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in subparagraph (2)(uu) of this rule) 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 subparagraph (2)(w) of this rule 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 shutdown after this 24-month period must be subtracted from the PAL level. Emissions from units on which actual construction began after the beginning of the 24-month period must be added to the PAL level in an amount equal to the potential to emit of the unit if the unit began operation less than 24 months prior to the submittal of the PAL application. Baseline actual emissions from units on which actual construction began after the beginning of the 24-month period and commenced operation 24 months or more prior to the submittal of the PAL application must be added to the PAL based upon any 24 month period since the unit commenced operation. The Director 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 Director 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 NO<sub>x</sub> 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).

(g) Contents of the PAL permit. The PAL permit must contain, at a minimum, the information in subparagraphs (23)(g)1. through 10. of this rule.

1. The PAL pollutant and the applicable source-wide emission limitation in tons per year.

2. The PAL permit effective date and the expiration date of the PAL (PAL effective period).

3. Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with subparagraph (23)(j) of this rule 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 Director.

4. A requirement that emission calculations for compliance purposes must include emissions from startups and shutdowns.

5. A requirement that, once the PAL expires, the major stationary source is subject to the requirements of subparagraph (23)(i) of this rule.

6. The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by subparagraph (23)(m)1. of this rule.

7. A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under subparagraph (23)(l) of this rule.

8. A requirement to retain the records required under subparagraph (23)(m) of this rule on site. Such records may be retained in an electronic format.

9. A requirement to submit the reports required under subparagraph (23)(n) of this rule by the required deadlines.

10. Any other requirements that the Director deems necessary to implement and enforce the PAL.

(h) PAL effective period and reopening of the PAL permit. The requirements in subparagraphs (23)(h)1. and 2. of this rule apply to actuals PALs.

1. PAL effective period. The Director shall specify a PAL effective period of 10 years.

2. Reopening of the PAL permit.

(i) During the PAL effective period, the Director must reopen the PAL permit to:

(I) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;

(II) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets under rule 335-3-14-.05 of this chapter; and

(III) Revise the PAL to reflect an increase in the PAL as provided under subparagraph (23)(k) of this rule.

(ii) The Director shall have discretion to reopen the PAL permit for the following:

(I) Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date;

(II) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and is required by these regulations; and

(III) Reduce the PAL if the Director determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on a published 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.

(iii) Except for the permit reopening in subparagraph (23)(h)2.(i)(I) of this rule 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 subparagraph (23)(e) of this rule.

(i) Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in subparagraph (23)(j) of this rule shall expire at the end of the PAL effective period, and the requirements in subparagraphs (23)(i)1. through 5. of this rule shall apply.

1. 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 subparagraphs (23)(i)1.(i) and (ii) of this rule.

(i) Within the time frame specified for PAL renewals in subparagraph (23)(j)2. of this rule, 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 Director) 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 subparagraph (23)(j)5. of this rule, such distribution shall be made as if the PAL had been adjusted.

(ii) The Director 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 Director determines is appropriate.

2. Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Director 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.

3. Until the Director issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subparagraph (23)(i)1.(ii) of this rule, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.

4. Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in subparagraph (2)(b) of this rule.

5. The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, synthetic minor limit, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period.

(j) Renewal of a PAL.

1. The Director shall follow the procedures specified in subparagraph (23)(e) of this rule 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 Director.

2. Application deadline. A major stationary source owner or operator shall submit a timely application to the Director 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.

3. Application requirements. The application to renew a PAL permit shall contain the information required in subparagraphs (23)(j)3.(i) through (iv) of this rule.

(i) The information required in subparagraphs (23)(c)1. through 3. of this rule.

(ii) A proposed PAL level.

(iii) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).

(iv) Any other information the owner or operator wishes the Director to consider in determining the appropriate level for renewing the PAL.

4. PAL adjustment. In determining whether and how to adjust the PAL, the Director shall consider the options outlined in subparagraphs (23)(j)4.(i) and (ii) of this rule. However, in no case may any such adjustment fail to comply with subparagraph (23)(j)4.(iii) of this rule.

(i) If the emissions level calculated in accordance with subparagraph (23)(f) of this rule is equal to or greater than 80 percent of the PAL level, the

Director may renew the PAL at the same level without considering the factors set forth in subparagraph (23)(j)4.(ii) of this rule; or

(ii) The Director may set the PAL at a level that he or she determines to be more representative of the source's baseline actual emissions, or that he or she determines to be more 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 Director in his or her written rationale.

(iii) Notwithstanding subparagraphs (23)(j)4.(i) and (ii) of this rule:

(I) If the potential to emit of the major stationary source is less than the PAL, the Director shall adjust the PAL to a level no greater than the potential to emit of the source; and

(II) The Director shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of subparagraph (23)(k) of this rule (increasing a PAL).

5. 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 Director 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.

(k) Increasing a PAL during the PAL effective period.

1. The Director may increase a PAL emission limitation only if the major stationary source complies with the provisions in subparagraphs (23)(k)1.(i) through(iv) of this rule.

(i) 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.

(ii) 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.

(iii) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in subparagraph (23)(k)1.(i) of this rule, 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 major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.

(iv) 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.

2. The Director 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 subparagraph (23)(k)1.(ii)), plus the sum of the baseline actual emissions of the small emissions units.

3. The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of subparagraph (23)(e) of this rule.

(l) Monitoring requirements for PALs.

1. General requirements.

(i) 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.

(ii) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in subparagraphs (23)(l)2.(i) through (iv) of this rule and must be approved by the Director.

(iii) Notwithstanding subparagraph (23)(l)1.(ii) of this rule, an alternative monitoring approach that meets subparagraph (23)(l)1.(i) of this rule may be employed if approved by the Director.

(iv) Failure to use a monitoring system that meets the requirements of this rule renders the PAL invalid.

2. Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subparagraphs (23)(l)3. through 9. of this rule:



- (i) Mass balance calculations for activities using coatings or solvents;
- (ii) CEMS;
- (iii) CPMS or PEMS; and
- (iv) Emission factors.

3. 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:

(i) 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;

(ii) 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

(iii) 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 Director determines there is site-specific data or a site-specific monitoring program to support another content within the range.

4. CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(i) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

(ii) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.

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

(i) 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

(ii) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Director, while the emissions unit is operating.

6. Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(i) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

(ii) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(iii) 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 Director determines that testing is not required.

7. 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.

8. Notwithstanding the requirements in subparagraphs (23)(l)3. through 7. of this rule, 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 Director shall, at the time of permit issuance:

(i) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(ii) 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.

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

(m) Recordkeeping requirements.

1. The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of paragraph (23) of this rule 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.

2. The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:

(i) A copy of the PAL permit application and any applications for revisions to the PAL; and

(ii) Each annual certification of compliance pursuant to title V and the data relied on in certifying the compliance.

(n) Reporting and notification requirements. The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the Director in accordance with the applicable title V operating permit. The reports shall meet the requirements in subparagraphs (23)(n)1. through 3. of this rule.

1. Semi-annual report. This report shall contain the information required in subparagraphs (23)(n)1.(i) through (vii) of this rule.

(i) The identification of owner and operator and the permit number.

(ii) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to subparagraph (23)(m)1. of this rule.

(iii) 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.

(iv) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.

(v) 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.

(vi) 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 (23)(l)7 of this rule.

(vii) A signed statement by a responsible official (as defined in chapter 16 of these Regulations) certifying the truth, accuracy, and completeness of the information provided in the report.

2. 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 335-3-16-.05(c)3.(ii) shall satisfy this reporting requirement. The reports shall contain the following information:

(i) The identification of owner and operator and the permit number;

(ii) The PAL requirement that experienced the deviation or that was exceeded;

(iii) Emissions resulting from the deviation or the exceedance; and

(iv) A signed statement by a responsible official (as defined in chapter 16 of these Regulations) certifying the truth, accuracy, and completeness of the information provided in the report.

3. Re-validation results. The owner or operator shall submit to the Director the results of any re-validation test or method within 3 months after completion of such test or method.

(o) Transition requirements.

1. The Director may not issue a PAL that does not comply with the requirements in subparagraphs (23)(a) through(o) of this rule after the effective date of this rule.

2. The Director may supersede any PAL that was established prior to the effective date of this rule with a PAL that complies with the requirements of subparagraphs (23)(a) through (o) of this rule.

(24) If any provision of this rule, or the application of such provision to any person or circumstance, is held invalid, the remainder of this rule, 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.

**Author:** Marilyn G. Elliott; Ronald W. Gore.

**Statutory Authority:** Code of Alabama 1975, §§22-28-14, 22-22A-5, 22-22A-6, and 22-22A-8.

**History:** Effective Date: December 10, 1981.

**Amended:** February 13, 1985; November 13, 1985; November 1, 1990, December 28, 1993; April 27, 1995; November 21, 1996; January 15, 1998; May 20, 1999; September 7, 2000; March 14, 2002; July 11, 2006; January 18, 2011; May 23, 2011; XXXXXX, 2012