Arkansas Regulation No. 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control

CHAPTER 9: PREVENTION OF SIGNIFICANT DETERIORATION
As approved by EPA March 4, 2015 (80 FR 11573) effective April 3, 2015 (ARd18),
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Reg. 19.901 Title. ARd07

As approved by the Arkansas Pollution Control and Ecology Commission on December 3, 2004, effective December 19, 2004, and submitted to EPA February 3, 2005 [CFR date].

Regulations.gov document EPA-R06-OAR-2005-AR-0001-0002 [AR001.02] Approved by EPA April 12, 2007 (72 FR 18394) effective May 14, 2007 (ARd07).

Reg. 19.902 Purposes. ARd14

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Reg. 19.903 Definitions. ARd18

As adopted by the Arkansas Pollution Control and Ecology (PC&E) Commission August 22, 2014, effective September 13, 2014 [CFR date] and submitted to EPA December 1, 2014 (AR-41).

Regulations.gov document EPA-R06-OAR-2014-0700-0009 [AR018.09].

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Reg. 19.904 Adoption of Regulations. ARd18
As adopted by the Arkansas Pollution Control and Ecology (PC&E) Commission
August 22, 2014, effective September 13, 2014 [CFR date] and submitted to EPA
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Regulations.gov document EPA-R06-OAR-2014-0700-0009 [AR018.09].

Approved by EPA March 4, 2015 (80 FR 11573), SIP effective April 3, 2015 (ARd18) to August 5, 2015.

CFR Explanation:

The SIP-approved PSD program does not include the new provisions pertaining to GHG PSD PAL permitting at Regulation 19.904(A)(1), effective on July 27, 2013, and submitted to EPA on January 7, 2014 [i.e., paragraph 19.401(A)(1) NOT in SIP].

The SIP-approved PSD program does not include the revisions to Regulation 19.904(G)(1), effective on July 27, 2013, and submitted to EPA on January 7, 2014, pertaining to GHG PSD PAL permitting.

The Arkansas SIP continues to include Regulation 19.904(G)(1) as approved by EPA on April 12, 2007, as submitted by the state on February 3, 2005.

EDITOR'S NOTE RE CFR Explanation:

There is NO Regulation 19.904(G)(1) in Regulation 19.904 as approved by the Arkansas Pollution Control and Ecology Commission on December 3, 2004, effective December 19, 2004, and submitted to EPA February 3, 2005. See Regulations.gov document EPA-R06-OAR-2005-AR-0001-0002 [AR001.02]. This compilation assumes that Regulation 19.904(G)(1) as adopted by the Arkansas Pollution Control and Ecology (PC&E) Commission August 22, 2014, effective September 13, 2014 [CFR date] and submitted to EPA December 1, 2014 (AR-41), is NOT in the Arkansas SIP as approved by EPA March 4, 2015 (80 FR 11573) effective April 3, 2015 (ARd18).

Struck-out text not in SIP

#### **CHAPTER 9: PREVENTION OF SIGNIFICANT DETERIORATION**

### **Reg. 19.901 Title**

The following rules and regulations of the Arkansas Pollution Control and Ecology Commission, adopted in accordance with the provisions of Part II of the Arkansas Water and Air Pollution Control Act at A.C.A. §§ 8-4-101 *et seq.*, shall be known as the Prevention of Significant Deterioration Regulations of the Arkansas Plan of Implementation for Air Pollution Control, hereinafter referred to, respectively, as the "PSD Regulations."

### Reg. 19.902 Purposes

Promulgation and enforcement of these PSD Regulations is intended to further the purposes of the Plan and the Regulations of the Plan, including, but not limited to, acceptance of delegation by the EPA of authority for enforcement of regulations governing the prevention of significant deterioration of air quality and regulations governing the protection of visibility in mandatory Class I federal areas.

# Reg. 19.903 Definitions

- (A) "Advance notification" (of a permit application) means any written communication which establishes the applicant's intention to construct, and which provides the Department with sufficient information to determine that the proposed source may constitute a major new source or major modification, and that such source may affect any mandatory Class I federal area, including, but not limited to, submittal of a draft or partial permit application, a PSD monitoring plan, or a sufficiently detailed letter. "Advance notification" does not include general inquiries about the Department's regulations.
- (B) "Regulated NSR Pollutant," for purposes of this chapter, means the following:
  - (1) Any pollutant for which a national ambient air quality standard has been adopted under Chapter 2 of this Regulation and any pollutant identified under this paragraph (B)(1) as a constituent or precursor for such pollutant. Precursors identified by the Department for purposes of NSR are the following:

- (a) Volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment and unclassifiable areas.
- (b) Sulfur dioxide is a precursor to  $PM_{2.5}$  in all attainment and unclassifiable areas.
- (c) Nitrogen oxides are presumed to be precursors to PM<sub>2.5</sub> in all attainment and unclassifiable areas, unless Arkansas demonstrates to the Administrator's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient PM<sub>2.5</sub> concentrations.
- (d) Volatile organic compounds are presumed not to be precursors to PM<sub>2.5</sub> in any attainment or unclassifiable area, unless Arkansas demonstrates to the Administrator's satisfaction or EPA demonstrates that emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient PM<sub>2.5</sub> concentrations.
- (2) Any pollutant that is subject to any standard promulgated under Section 111 of the Act as of July 27, 2012;
- (3) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act;
- (4) Any pollutant that otherwise is subject to regulation under the Act;
- Notwithstanding paragraphs (B)(1) through (4) of this section, the term *regulated NSR pollutant* shall not include any or all hazardous air pollutants either listed in Section 112 of the Act, or added to the list pursuant to Section 112(b)(2) of the Act, and which have not been delisted pursuant to Section 112(b)(3) of the Act, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under Section 108 of the Act as of July 27, 2012; and
- (6) PM<sub>2.5</sub> emissions and PM<sub>10</sub> emissions shall include gaseous emissions from a

source or activity, which condense to form particulate matter at ambient temperatures. As of the effective date of the rulemaking action initiated by the Commission on September 28, 2012, such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM<sub>2.5</sub>, and PM<sub>10</sub> in PSD permits. Compliance with emissions limitations for PM<sub>2.5</sub>, and PM<sub>10</sub> issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this chapter.

- (C) For the purpose of this chapter, "subject to regulation" means, for any air pollutant, that the pollutant is subject to either a provision of the federal Clean Air Act, or a nationally-applicable regulation codified by the Administrator pursuant to 40 CFR, Chapter 1, Subchapter C and adopted herein, that requires actual control of the quantity of emissions of that pollutant and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity.
- (D) All other terms used herein shall have the same meaning as set forth in Chapter 2 of Regulation 19 or in 40 CFR § 52.21(b) [PSD] and 40 CFR § 51.301 [Protection of Visibility] as of October 20, 2010, and adopted in Reg. 19.904, unless manifestly inconsistent with the context in which they are used. Wherever there is a difference between the definitions in Chapter 2 of Regulation 19 and those listed in 40 CFR § 52.21(b) and CFR § 51.301, the federal definitions as listed in 40 CFR § 52.21(b), as adopted in Reg. 19.904 and Reg. 19.903(A), (B) and (C), and 40 CFR § 51.301 as of October 20, 2010, shall apply.
- (E) The definition for "routine maintenance, repair and replacement" in 40 CFR § 52.21(b)(2)(iii)(a) is not incorporated.

## Reg. 19.904 Adoption of Regulations

- (A) Except where manifestly inconsistent with the provisions of the Clean Air Act, as amended, or with federal regulations adopted pursuant thereto, and as amended specifically herein by paragraphs (B), (C), (D), (E), (F), and (G) of Reg. 19.904, the Arkansas Department of Environmental Quality shall have those responsibilities and that authority, with reference to the State of Arkansas, granted to the Administrator of the EPA under 40 CFR § 52.21 (a)(2) through (bb), as in effect on November 29, 2005, which are hereby incorporated herein by reference with the exception of:
  - 40 C.F.R. § 52.21(aa), which is incorporated by reference as in effect on August 13, 2012, except for instances in the sections of 40 C.F.R. § 52.21(aa) where 40 C.F.R. § 52.21(b)(49) is referenced. In those instances, paragraph (G) of Reg. 19.904 shall apply;
  - (2) 40 CFR §§ 52.21(b)(23), 52.21(i)(5)(ii), and 52.21(i)(5)(iii), which are incorporated by reference as of May 16, 2008;
  - (3) 40 CFR §§ 52.21(b)(14)(i) [Major Source Baseline Date], 52.21(b)(14)(ii) [Minor Source Baseline Date], 52.21(b)(14)(iii), 52.21(b)(15) [Baseline Area], 52.21(c) [Ambient Air Increments], 52.21(k)(1) [Source Impact Analysis Requirements], and 52.21(p) [Requirements for Sources Impacting Federal Class I areas], which are incorporated herein by reference as of October 20, 2010;
  - (4) 40 CFR §§ 52.21(b)(49), 52.21(b)(50), 52.21(b)(55-58), 52.21(i)(9), and 52.21(cc), which are not incorporated herein.

In the absence of a specific imposition of responsibility or grant of authority, the Department shall be deemed to have that responsibility and authority necessary to attain the purposes of the Plan, these PSD Regulations, and the applicable federal regulations, as incorporated herein by reference.

(B) Exclusions from the consumption of increments, as provided in 40 CFR 51.166(f)(1)(iii) as of November 29, 2005, shall be effective immediately. Submission of this Plan under the Governor's signature constitutes a request by the Governor for this exclusion.

- (C) In addition to the requirements of 40 CFR 52.21(o) as of November 29, 2005, the following requirements [designated as Reg. 19.904(C)(1),(2),(3) and (4)] shall also apply:
  - (1) Where air quality impact analyses required under this part indicate that the issuance of a permit for any major stationary source or for any major modification would result in the consumption of more than fifty percent (50%) of any available annual increment or eighty percent (80%) of any short term increment, the person applying for such a permit shall submit to the Department an assessment of the following factors:
    - (a) Effects that the proposed consumption would have upon the industrial and economic development within the area of the proposed source; and
    - (b) Alternatives to such consumption, including alternative siting of the proposed source or portions thereof.
  - (2) The assessment required under subparagraph (4) above shall be made part of the application for permit and shall be made available for public inspection as provided in 40 CFR 52.21(q) as of November 29, 2005.
  - (3) The assessment required under subparagraph (4) above shall be in detail commensurate with the degree of proposed increment consumption, both in terms of the percentage of increment consumed and the area affected.
  - (4) The assessment required under subparagraph (4) above may be made effective where a proposed source would cause an increment consumption less than that specified in said subparagraph if the Director finds that unusual circumstances exist in the area of the proposed source which warrant such an assessment. The Director shall notify the applicant in writing of those circumstances which warrant said assessment. The Commission may rescind or modify the Director's action, upon a showing by the applicant that the circumstances alleged by the Director either do not exist or do not warrant the aforecited assessment.
- (D) In addition to the requirements of 40 CFR 52.21(p)(1) as of October 20, 2010, the following requirements shall also apply:

Impacts on mandatory Class I federal areas include impacts on visibility. The preliminary determination that a source may affect air quality or visibility in a mandatory Class I federal area shall be made by the Department, based on screening criteria agreed upon by the Department and the Federal Land Manager.

- (E) In all instances wherein the aforesaid 40 CFR 51.301 and 40 CFR 52.21 refer to the Administrator or the Environmental Protection Agency, the reference, for the purposes of paragraph (A) of Reg. 19.904, shall be deemed to mean the Arkansas Department of Environmental Quality, unless the context plainly dictates otherwise, except in the following sections:
  - (1) Exclusion from increment consumption: 40 CFR 52.21(f)(1)(v), (f)(3), and (f)(4)(I);
  - (2) Redesignation: 40 CFR 52.21(g)(1), (g)(2), (g)(4), (g)(5), and (g)(6);
  - (3) Air quality models: 40 CFR 52.21(1)(2).
- (F) Redesignation of air quality areas in Arkansas shall comply with Arkansas Code Annotated 1987 Section 8-3-101 *et seq*.
- (G) For the purpose of the regulation of GHGs, only the standards and requirements promulgated by EPA as of June 3, 2010, related to the permitting of GHG emissions shall apply to the requirements of 40 CFR 52.21, as of November 29, 2005, incorporated by reference at Reg.19.904(A). The following definitions and requirements shall also apply:
  - "Greenhouse gases" (GHGs) means the air pollutant defined as the aggregate group of six greenhouse gases: earbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation except as provided in Reg. 19.904(G)(4) through Reg.19.904(G)(5), and shall not be subject to regulation if the stationary source:
    - (a) Maintains its total source-wide emissions below the GHG plantwide applicability limitations (hereinafter "PAL") level;
    - (b) Meets the requirements in 40 § C.F.R 52.21(aa)(1) through 40 C.F.R. § 52.21(aa)(15) as outlined in Reg. 19.904(A)(1); and

- (e) Complies with the PAL permit containing the GHG PAL.
- (2) For purposes of Reg. 19.904(G)(3) through Reg.19.904(G)(5):
  - (a) The term tons per year (tpy) "CO<sub>2</sub> equivalent emissions" (CO<sub>2</sub>e) shall represent an amount of GHGs emitted, and shall be computed as follows:
    - (i) Multiplying the mass amount of emissions in tpy, for each of the six greenhouse gases in the pollutant GHGs, by each gas's associated global warming potential published at Table A 1 to subpart A of 40 CFR part 98 Global Warming Potentials (as of October 30, 2009); and
    - (ii) Sum the resultant values from Reg. 19.904(G)(2)(a) for each gas to compute a tpy CO<sub>2</sub>e.
  - (b) For purposes of this definition, prior to July 21, 2014, the mass of the greenhouse gas carbon dioxide shall not include carbon dioxide emissions resulting from the combustion or decomposition of non-fossilized and biodegradable organic material originating from plants, animals, or microorganisms (including products, by-products, residues and waste from agriculture, forestry and related industries as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material).
- The term "emissions increase" as used in Reg. 19.904(G)(4) through Reg. 19.904(G)(5) shall mean that both a significant emissions increase (as calculated using the procedures in 40 CFR 52.21(a)(2)(iv), as of November 29, 2005), and a significant net emissions increase (as defined in 40 CFR 52.21(b)(3), as of November 29, 2005, and 40 CFR 52.21(b)(23), as of November 29, 2005), occur. For the pollutant GHGs, an emissions increase shall be based on tpy CO<sub>2</sub>e, and shall be calculated assuming the pollutant GHGs is a regulated NSR pollutant, and "significant" is defined as 75,000 tpy CO<sub>2</sub>e instead of applying the value in 40 CFR 52.21(b)(23)(ii), as of November 29, 2005.

- (4) Beginning January 2, 2011, the pollutant GHGs is subject to regulation if:
  - (a) The stationary source is a new major stationary source for a regulated NSR pollutant that is not GHGs, and also will emit or will have the potential to emit GHGs at 75,000 tpy CO<sub>2</sub>e or more; or
  - (b) The stationary source is an existing major stationary source for a regulated NSR pollutant that is not GHGs, and also will have an emissions increase of a regulated NSR pollutant, and an emissions increase of GHGs of 75,000 tpy CO<sub>2</sub>e or more.
- (5) Beginning July 1, 2011, in addition to the provisions in Reg.19.904(G)(4) of this section, the pollutant GHGs shall also be subject to regulation:
  - (a) At a new stationary source that will emit or have the potential to emit 100,000 tpy CO<sub>2</sub>e or more; or
  - (b) At an existing stationary source that emits or has the potential to emit 100,000 tpy CO<sub>2</sub>e or more, when such stationary source undertakes a physical change or change in the method of operation that will result in an emissions increase of 75,000 tpy CO<sub>2</sub>e or more.