

## SUBCHAPTER 8. PERMITS FOR PART 70 SOURCES

### PART 11. VISIBILITY PROTECTION STANDARDS

#### 252:100-8-70. Applicability

This Part applies to any BART-eligible source (existing stationary facility as defined in OAC 252:100-8-71) which may reasonably be anticipated to cause or contribute to visibility impairment at any mandatory Class I Federal area.

#### 252:100-8-71. Definitions

The following words and terms when used in this Part shall have the following meaning, unless the context clearly indicates otherwise. All terms used in this Part that are not defined in this Subsection shall have the meaning given to them in OAC 252:100-1-3, 252:100-8-1.1, 252:100-8-31, or in the Oklahoma Clean Air Act.

"BART-eligible source" means an existing stationary facility as defined in this Section.

"Best Available Retrofit Technology" or "BART" means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by a BART-eligible source. The emission limitation must be established on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and non-air quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

"Deciview" means a measurement of visibility impairment. A deciview is a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired. The deciview haze index is calculated based on the following equation (for the purposes of calculating deciview, the atmospheric light extinction coefficient must be calculated from aerosol measurements):

$$\text{Deciview haze index} = 10 \ln_e (b_{\text{ext}}/10 \text{ Mm}^{-1}).$$

Where  $b_{\text{ext}}$  = the atmospheric light extinction coefficient, expressed in inverse megameters ( $\text{Mm}^{-1}$ ).

"Existing stationary facility" means any of the following stationary sources of air pollutants, including any reconstructed source, which was not in operation prior to August 7, 1962, and was in existence on August 7, 1977, and has the potential to emit 250 TPY or more of any air pollutant. In

determining potential to emit, fugitive emissions, to the extent quantifiable, must be counted.

- (A) Fossil-fuel fired steam electric plants of more than 250 million Btu/hr input,
- (B) Coal cleaning plants (thermal dryers),
- (C) Kraft pulp mills,
- (D) Portland cement plants,
- (E) Primary zinc smelters,
- (F) Iron and steel mill plants,
- (G) Primary aluminum ore reduction plants,
- (H) Primary copper smelters,
- (I) Municipal incinerators capable of charging more than 250 tons of refuse per day,
- (J) Hydrofluoric, sulfuric, and nitric acid plants,
- (K) Petroleum refineries,
- (L) Lime plants,
- (M) Phosphate rock processing plants,
- (N) Coke oven batteries,
- (O) Sulfur recovery plants,
- (P) Carbon black plants (furnace process),
- (Q) Primary lead smelters,
- (R) Fuel conversion plants,
- (S) Sintering plants,
- (T) Secondary metal production facilities,
- (U) Chemical process plants,
- (V) Fossil-fuel boilers of more than 250 million Btu per hour heat input,
- (W) Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels,
- (X) Taconite ore processing facilities,
- (Y) Glass fiber processing plants, and
- (Z) Charcoal production facilities

"In existence" means that the owner or operator has obtained all necessary preconstruction approvals or permits required by the Department and EPA and either has:

- (A) begun, or caused to begin, a continuous program of physical on-site construction of the facility; or
- (B) entered into binding agreements or contractual obligations which cannot be cancelled or modified without substantial loss to the owner or operator to undertake a program of construction of the facility to be completed in a reasonable time.

"In operation" means engaged in activity related to the primary design function of the source.

"Integral vista" means a view perceived from within the mandatory Class I Federal area of a specific landmark or panorama located outside the boundary of the mandatory Class I Federal area.

**"Mandatory Class I Federal area"** means any area identified in 40 CFR part 81, subpart D.

**"Potential to emit"** means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

**"Reasonably attributable"** means attributable by visual observation or any other technique the Department deems appropriate.

**"Secondary emissions"** means emissions which occur as a result of the construction or operation of a BART-eligible source but do not come from the BART-eligible source. Secondary emissions may include, but are not limited to, emissions from ships or trains coming to or from the BART-eligible source.

**"Visibility in any mandatory Class I Federal area"** includes any integral vista associated with that area.

**252:100:8-72. Incorporation by reference.**

Appendix Y, Guidelines for BART Determinations Under the Regional Haze Rule, of 40 CFR 51 is hereby incorporated by reference as it exists July 6, 2005.

**252:100-8-73. BART applicability**

(a) Each BART-eligible source that emits any air pollutant which may reasonably be anticipated to cause or contribute to visibility impairment in any mandatory Class I Federal area is subject to BART. This shall be determined using the criteria in Section III of Appendix Y of 40 CFR 51 in effect on July 6, 2005. Thresholds for visibility impairment are set forth in OAC 252:100-8-73(a)(1) and (2).

(1) A single source that is responsible for an impact of 1.0 deciview or more is considered to cause visibility impairment.

(2) A source that causes an impact greater than 0.5 deciviews contributes to visibility impairment.

(b) Air pollutants emitted by sources in Oklahoma which may reasonably be anticipated to cause or contribute to visibility impairment in any mandatory Class I Federal area are NO<sub>x</sub>, SO<sub>2</sub>, PM-10, and PM-2.5.

(c) The owner or operator of a BART-eligible source may request and obtain a waiver from the Department that a BART determination is not required:

(1) for SO<sub>2</sub> or for NO<sub>x</sub> if the BART-eligible source has the potential to emit less than 40 TPY of such pollutant(s),

(2) for PM-10 if the BART-eligible source emits less than 15 TPY of such pollutant, or

(3) if the owner or operator of the BART-eligible source demonstrates by modeling, in accordance with a protocol approved by the Director, that a source does not emit any air pollutant which may reasonably be anticipated to cause or contribute to visibility impairment in any mandatory Class I Federal area. This third option is limited to BART-eligible sources with plantwide emissions of greater than 40 TPY but less than 250 TPY of SO<sub>2</sub> or NO<sub>x</sub> and/or greater than 15 TPY but less than 250 TPY of PM-10.

**252:100-8-74. Exemption from BART requirements**

(a) The owner or operator of any BART-eligible source subject to the requirements of this Part to install, operate, and maintain BART may apply to the Administrator for exemption from that requirement.

(b) Should the owner or operator of a BART-eligible source wish to apply for exemption as provided for in 40 CFR 51.303, such application must be accompanied by a written concurrence from the Director.

**252:100-8-75. Visibility standards for existing stationary facilities**

(a) The owner or operator of a BART-eligible source that emits any air pollutant which causes or contributes to visibility impairment in any mandatory Class I Federal area shall establish emissions limitations by the application of BART.

(1) The determination of BART must be based on an analysis of the best system of continuous emission control technology available and associated emission reduction achievable for each BART-eligible source that is subject to BART.

(2) After the level of control that represents BART is determined, an emission limit representing this level of control must be established.

(3) BART may be established as design, equipment, work practice, or other operational standards or combination thereof, when limitations on measurement technologies make emission standards infeasible, if such application achieve equivalent results. Such standard, to the degree possible, shall set forth the emission reduction to be achieved and must provide for compliance by means which achieve equivalent results.

(b) The determination of BART shall be made pursuant to the guidelines in Appendix Y of 40 CFR 51 in effect on July 6, 2005.

(c) The owner or operator of each BART-eligible source subject to BART pursuant to OAC 252:100-8-73 shall submit the proposed BART to the Director by December 1, 2006. BART-eligible sources that have not obtained a waiver pursuant to OAC 252:100-8-73 or

an exemption pursuant to OAC 252:100-8-74 shall be deemed subject to BART on December 1, 2006.

(d) The owner or operator of each BART-eligible source subject to BART shall install and operate BART no later than five years after EPA approves the Oklahoma Regional Haze SIP.

(e) The owner or operator of each source subject to BART shall maintain the control equipment required by this Part and establish procedures to ensure such equipment is properly and continuously operated and maintained.

(f) The owner or operator of any BART-eligible source that might cause or contribute to visibility impairment in any mandatory Class I Federal area must provide a BART analysis at such times, as determined by the Administrator, as new technology for control of the pollutant becomes reasonably available if:

(1) the pollutant is emitted by that BART-eligible source;

(2) controls representing BART for the pollutant have not previously been required under this Part; and

(3) the visibility impairment in any mandatory Class I Federal area is reasonably attributable to the emissions of that pollutant.

**252:100-8-76. Permit requirements**

The BART requirements for any BART-eligible source that is subject to BART shall be submitted to the Director pursuant to OAC 252:100-8-7.2 no later than December 1, 2006.

**252:100-8-77. Cap and/or trade program.**

Nothing in this rule precludes the establishment of a cap and/or trade program that will achieve greater reasonable progress than would be achieved through the installation and operation of BART.