# RULES

OF

# THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL

# CHAPTER 1200-03-23 VISIBILITY PROTECTION

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#### 1200-03-23-.01 PURPOSE.

The purpose of this Chapter is to assure reasonable progress toward meeting the goal of preventing any future, and remedying any existing impairment of visibility in mandatory Class I Federal areas in which impairment results from man-made air pollution.

**Authority:** T.C.A. §§ 4-5-201, et seq. and 68-25-105. **Administrative History:** Original rule filed September 22, 1988; effective November 6, 1988.

#### 1200-03-23-.02 DEFINITIONS.

Unless specifically defined in this Chapter, the definitions from Chapter 1200-03-02 and Paragraph 1200-03-09-.01(4) shall apply:

- (1) "Best Available Retrofit Technology (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 an existing stationary facility. 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 nonair 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.
- (2) "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 tons per year or more of any air pollutant. In determining the potential to emit, fugitive emissions must be counted, to the extent quantifiable.
  - (a) Fossil fuel fired steam electric plants of more than 250 million British thermal units per hour heat input.
  - (b) Coal cleaning plants (thermal dryers),
  - (c) Kraft pulp mills,
  - (d) Portland cement plants,
  - (e) Primary zinc smelters,

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- (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,
- (I) 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 British thermal units 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.
- (3) "Federal Class I area" means any Federal land that is classified or reclassified "Class I".
- (4) "Fixed Capital Cost" means the capital needed to provide all of the depreciable components.
- (5) "In existence' means that the owner or operator has obtained all necessary preconstruction approvals or permits required by this Division and either has (1) begun, or caused to begin, a continuous program of physical on-site construction of the facility 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 construction of the facility to be completed in a reasonable time.
- (6) "In operation" means engaged in activity related to the primary design function of the source.

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- (7) "Mandatory Class I Federal area" means any area identified by the Administrator of the EPA, including the Great Smoky Mountains National Park, the Joyce Kilmer Slickrock National Wilderness Area, the Linville Gorge Wilderness Area, Cohutta Wilderness Area, Shining Rock Wilderness Area, Sipsey Wilderness Area, the Mingo National Wilderness Area, and the Mammoth Cave National Park including any integral vista associated with these areas.
- (8) "Natural Conditions" includes naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast, or coloration.
- (9) "Reconstruction" will be presumed to have taken place where the fixed "capital cost of the new component exceeds 50 percent of the taxed capital cost of a comparable entirely new source. Any final decision as to whether reconstruction has occurred must be made in accordance with the requirements of 40 CFR Part 60.15, Standards of Performance for New Stationary Sources" (dated July 1, 1993.)
- (10) "Visibility Impairment" means any humanly perceptible change in visibility (visual range, contrast, coloration) from that which would have existed under natural conditions.
- (11) "Significant Impairment" means visibility impairment which, in the judgment of the Technical Secretary, interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the mandatory Class I Federal area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of the visibility impairment, and how these factors correlate with times of visitor use of the mandatory Class I Federal area, and the frequency and timing of natural conditions that reduce visibility.
- (12) "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.
- (13) "Continuous program of physical on-site construction" means significant and continuous site preparation work such as major clearing or excavation followed by placement of footings, pilings, and other materials of construction, assembly, or installation of unique facilities or equipment at the site of the source.
- (14) "Substantial loss" generally means a loss which would equal or exceed 10 percent of the total project cost.
- (15) "Adverse impact on visibility" means, for purposes of 1200-03-23, visibility impairment which interferes with 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:
  - (a) Times of visitor use of the Federal Class I area, and
  - (b) The frequency and timing of natural conditions that reduce visibility. This term does not include integral vistas.
- (16) "Pollutant" means, for this Rule, for particulate matter, the standards expressed in 1200-03-03, Table I which are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 mg/m³ as determined in accordance with 40 CFR 50 Appendix K (July 1, 1993), is equal to or less than one.
- (17) "Reasonably attributable" means attributable by visual observation or any other technique the Technical Secretary deems appropriate.

(Rule 1200-03-23-.02, continued)

**Authority:** T.C.A. §§ 4-5-201, et seq. and 68-25-105. **Administrative History:** Original rule filed September 22, 1988; effective November 6, 1988. Amendment filed May 10, 1994; effective July 24, 1994.

#### 1200-03-23-.03 GENERAL VISIBILITY PROTECTION STANDARDS.

- (1) No person shall cause, suffer, allow, or permit emissions in excess of the standards in this Chapter.
- (2) Upon mutual agreement of the owner or operator of a source and the Technical Secretary, an emission limitation more restrictive than that otherwise specified in this Chapter may be established. Also, upon mutual agreement of the owner or operator of any source and the Technical Secretary, operating hours, process flow rates, or any other operating parameters may be established as a binding limit(s). The mutually acceptable limits shall be stated as a special condition(s) for any permit or order concerning the source. Violation of any accepted special limitations is grounds for revocation of the issued permit and/or other enforcement measures provided for in the Tennessee" Air Quality Act.
- (3) The possession of a valid permit shall not protect the source from enforcement actions if permit conditions are not met.

**Authority:** T.C.A. §§ 4-5-201, et seq. and 68-25-103. **Administrative History:** Original rule filed September 22, 1988; effective November 6, 1988.

#### 1200-03-23-.04 SPECIFIC EMISSION STANDARDS FOR EXISTING STATIONARY FACILITIES.

For an existing stationary facility that causes visibility impairment in any mandatory Class I Federal area, the Technical Secretary shall specify on the operating permit(s) as permit conditions the emission limitation that is "best available retrofit technology (BART)", subject to the following provisions:

- (1) Best available retrofit technology (BART) must be determined for fossil-fuel fired generating lants having a total generating capacity in excess of 750 megawatts pursuant to "Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other Stationary Facilities" (1980).
- (2) Each existing stationary facility is required to install and operate BART as expeditiously as practicable but in no case later than five years after July 24, 1994.
- (3) A BART analysis will be provided for any existing stationary facility that might cause or contribute to impairment of visibility in any mandatory Class I Federal area at such times, as determined by the EPA, as new technology for control of the pollutant becomes reasonably available and if:
  - (a) The pollutant is emitted by that existing stationary facility:
  - (b) Controls representing BART for the pollutant have not previously been required under this rules; and
  - (c) The impairment of visibility in any mandatory Class I Federal area is reasonably attributable to the emissions of that pollutant.

**Authority:** T.C.A. §§ 4-5-201, et seq. and 68-25-105. **Administrative History:** Original rule filed September 22, 1988; effective November 6, 1988. Amendment filed May 10, 1994; effective July 24, 1994.

### 1200-03-23-.05 SPECIFIC EMISSION STANDARDS FOR EXISTING SOURCES.

For any existing source that causes visibility impairment in any mandatory Class I Federal area, the Technical Secretary may specify on the construction and/or operating permit(s) as permit conditions an emission limitation that is equivalent to "BART". Existing sources subject to the provisions of rule .04 are not subject to the provisions of this Rule ( 1200-03-23-.05).

**Authority:** T.C.A. §§ 4-5-201, et seq. and 68-25-105. **Administrative History:** Original rule filed September 22, 1988; effective November 6, 1988. Amendment filed May 10, 1994; effective July 24, 1994.

## 1200-03-23-.06 VISIBILITY STANDARDS FOR NEW AND MODIFIED SOURCES.

- (1) A new "major stationary source" or a "major modification" constructing in an attainment area or unclassifiable area must meet the requirements in Paragraph 1200-03-09-.01(4), Prevention of Significant Deterioration.
- (2) A new "major stationary source" or a "major modification" constructing in a non-attainment area must meet the requirements in Parts 1200-03-09-.01(5)(b)3. and 4.
- (3) For any new source or modification whose air contaminant emissions may cause visibility impairment in a mandatory Class I Federal area, the Technical Secretary may require "best available control technology (BACT)".

**Authority:** T.C.A. §§ 4-5-201, et seq. and 68-25-105. **Administrative History:** Original rule filed September 22, 1988; effective November 6, 1988.

#### 1200-03-23-.07 VISIBILITY MONITORING REQUIREMENTS.

The Technical Secretary may require visibility monitoring in the vicinity of a source regulated by this Chapter 1200-03-23. This monitoring shall be done in accordance with the requirements as specified by the Technical Secretary.

**Authority:** T.C.A. §§68-25-103 and 4-5-201 et. seq. **Administrative History:** Original rule filed September 22, 1988; effective November 6, 1988.

# 1200-03-23-.08 EXEMPTIONS FROM BART REQUIREMENTS.

- (1) Any existing stationary facility subject to the requirement of this chapter to install, operate, and maintain BART may apply to the Administrator of the EPA through the Technical Secretary for an exemption from that requirement.
- (2) An application under this rule must include all available documentation relevant to the impact of the source's emissions on visibility in any mandatory Class I Federal area and a demonstration by the existing stationary facility that it does not or will not, by itself or in combination with other sources, emit any air pollutant which may be reasonably anticipated to cause or contribute to a significant impairment of visibility in any mandatory Class I Federal area.
- (3) Any fossil-fuel fired power plant with a total generating capacity of 750 megawatts or more may receive an exemption from BART only if the owner or operator of such power plant demonstrates to the satisfaction of the Technical Secretary that such power plant is located at such a distance from all mandatory Class I Federal areas that such power plant does not or will not, by itself or in combination with other sources, emit any air pollutant which may reasonably be anticipated to cause or contribute to significant impairment of visibility in any such mandatory Class I Federal area.

(Rule 1200-03-23-.08, continued)

- (4) The existing stationary facility must give prior written notice to all affected Federal Land Managers of any application for exemption under this rule.
- (5) The Federal Land Manager may provide an initial recommendation or comment on the disposition of such application. Such recommendation, where provided, must be part of the exemption application. This recommendation is not to be construed as the concurrence required under Paragraph (6) below.
- (6) The Technical Secretary within 90 days of receipt of an application for exemption from control, will provide notice of receipt of an exemption application and notice of opportunity for public hearing on the application. After notice and opportunity for public hearing, the Technical Secretary may concur with the application for exemption. If the Technical Secretary concurs, the application for exemption accompanied by the Technical Secretary's written concurrence will be forwarded to the Administrator of the EPA who will grant or deny the exemption. An exemption granted by the Administrator of the EPA will be effective only upon concurrence by all affected Federal Land Managers with the Administrator of the EPA's determination.

**Authority:** T.C.A. §§ 4-5-201, et seq. and 68-25-105. **Administrative History:** Original rule filed September 22, 1988; effective November 6, 1988. Amendment filed May 10, 1994; effective July 24, 1994.