PART 249

BEST AVAILABLE RETROFIT TECHNOLOGY (BART)

(Statutory authority: Environmental Conservation Law, §§ 1-0101, 3-0301, 19-0103, 19-0105, 19-0301, 19-0303, 19-0305, 71-2103, 71-2105; Federal Clean Air Act, § 177)

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Historical Note

Part (§§ 249.1-249.6) filed April 15, 1976; repealed, filed April 10, 1981; new (§§ 249.1-249.4) filed April 6, 2010 eff. 30 days after filing.

§ 249.1 Purpose and applicability.

- (a) This Part restricts the emissions of visibility-impairing pollutants by requiring the installation of Best Available Retrofit Technology (BART) on a BART-eligible stationary source to reduce regional haze and restore natural visibility conditions to Federal Class I Areas.
- (b) Except as provided under subdivision (c) of this section, this Part applies to any stationary source that has been determined to be BART-eligible and whose emissions require control pursuant to section 169A of the act. BART-eligible refers to any stationary source that:
 - (1) is in one of 26 specific source categories identified in section 231-2.2(c)(1) through (26) of this Title;
 - (2) was not in operation prior to August 7, 1962 and was in existence on August 7, 1977, or underwent reconstruction between August 7, 1962 and August 7, 1977; and
 - (3) has a potential to emit (PTE) 250 tons per year (tpy) or more of any visibility-impairing pollutant.
 - (c) Exempted from the provisions of this Part is any BART-eligible source that:
 - is subject to a permit condition that restricts the source's PTE to less than 250 tpy for each visibility-impairing pollutant;
 - (2) is subject to a permit condition that requires the source to permanently shut down by January 1, 2014; or
 - (3) has shown through modeling or other means acceptable to the department that it does not or will not emit any combination of visibility-impairing pollutants that results in a visibility impairment equal to or greater than 0.1 deciviews in any Federal Class I Area.

Historical Note

Sec. filed April 15, 1976; repealed, filed April 10, 1981; new filed April 6, 2010 eff. 30 days after filing.

§ 249.2 Definitions.

For the purpose of this regulation, the following definitions apply:

- (a) Best Available Retrofit Technology or BART. An emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each visibility-impairing pollutant which is emitted by an existing stationary facility. BART for any individual source is determined by undertaking the case-by-case analysis required under section 249.3 of this Part.
- (b) Deciview. 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):

 $HI = 10 \ln (b/10)$

Where b = the atmospheric light extinction coefficient, expressed in inverse megameters (Mm⁻¹).

- (c) Federal Class I Area. A national park which exceeds 6,000 acres, national wilderness area which exceeds 5,000 acres, national memorial park which exceeds 5,000 acres, or any international park, which was in existence as of August 7, 1977.
- (d) In existence. As used in section 249.1(b)(2) of this Part, the owner or operator has obtained all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations and either has:
 - 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.
- (e) Light extinction. The process of light being absorbed or scattered as it passes through a medium, such as the atmosphere.
- (f) Natural visibility conditions. Includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.
- (g) Reconstruction. Where the fixed capital cost of the new component exceeds 50 percent of the fixed capital cost of a comparable entirely new source. Any final decision as to whether reconstruction has occurred must be made in accordance with the provisions of 40 CFR 60.15(f)(1) through (3).
- (h) Regional haze. Visibility impairment that is caused by the emission of visibility-impairing air pollutants from numerous sources located over a wide geographic area.
- Visibility-impairing pollutant. Sulfur dioxide (SO₂), nitrogen oxides (NO_x), and particulate matter less than or equal to 10 microns in diameter (PM₁₀).
- (j) Visibility impairment. Any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions.

Historical Note

Sec. filed April 15, 1976; repealed, filed April 10, 1981; new filed April 6, 2010 eff. 30 days after filing.

§ 249.3 Requirements for sources subject to case-by-case BART determinations.

- (a) The owner or operator of a source that is determined to be BART-eligible and whose emissions of visibility-impairing pollutants result in a visibility impairment equal to or greater than 0.1 deciviews in any Federal Class I Area must conduct an analysis to determine the appropriate emission limitation necessary to meet BART requirements. The analysis must consider, with respect to each visibility-impairing pollutant emitted by the source, the following factors:
 - (1) the costs of compliance;
 - (2) the energy and non-air quality environmental impacts of compliance;
 - any existing pollution control technology in use at the source;
 - (4) the remaining useful life of the source; and
 - (5) the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.
- (b) The analysis must evaluate retrofit control options for each visibility-impairing pollutant unless facility-wide emissions for the relevant visibility-impairing pollutant are at or below the *de minimis* level. The facility-wide *de minimis* emissions levels are 40 tpy of SO₂ or NO_x, and 15 tpy of PM₁₀.
 - (c) Any required BART analysis must be submitted to the department by October 1, 2010.
- (d) Control equipment or other emission reduction methods approved by the department as BART must be installed and operating no later than January 1, 2014.

- (e) Before commencing any required construction or process changes, the owner or operator must submit an application for a permit or permit modification as required under Part 201 of this Title.
- (f) Each BART determination established by the department will be submitted to the United States Environmental Protection Agency for approval as a revision to the State Implementation Plan.

Historical Note

Sec. filed April 15, 1976; amds. filed: March 10, 1977; July 27, 1977; Jan. 30, 1978; repealed, filed April 10, 1981; new filed April 6, 2010 eff. 30 days after filing.

§ 249.4 Emissions tests and monitoring.

- (a) The owner or operator of the stationary source to which BART requirements apply must perform an emissions test according to a protocol approved by the department. This protocol must be submitted within six months of the commencement of operation of the BART controls. The protocol must include a schedule (using the date of department approval of the protocol as the starting event) for the performance of the required emissions test and submission of the emissions test report. The emissions test must demonstrate that the necessary emission reductions of visibility-impairing pollutants and other requirements under this Part are being met. Testing methods for particulate matter must quantify the emissions of PM₁₀ and particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}). Both filterable and condensable particulate matter must be included.
- (b) The owner or operator of the stationary source subject to BART requirements must provide, along with the analysis required under section 249.3 of this Part, a proposal for an appropriate emissions monitoring technology that will be implemented at the source.

Historical Note

Sec. filed April 15, 1976; amd. filed July 27, 1977; repealed, filed April 10, 1981; new filed April 6, 2010 eff. 30 days after filing.

§ 249.5

Historical Note

Sec. filed April 15, 1976; amd. filed July 27, 1977; repealed, filed April 10, 1981 eff. 30 days after filing.

§ 249.6

Historical Note

Sec. filed April 15, 1976; repealed, filed April 10, 1981 eff. 30 days after filing.