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Division 200 GENERAL AIR POLLUTION PROCEDURES AND DEFINITIONS

340-200-0040 State of Oregon Clean Air Act Implementation Plan

(1) This implementation plan, consisting of Volumes 2 and 3 of the State of Oregon Air Quality Control Program, contains control strategies, rules and standards prepared by DEQ and is adopted as the State Implementation Plan (SIP) of the State of Oregon under the FCAA, 42 U.S.C.A 7401 to 7671q.

(2) Except as provided in section (3), revisions to the SIP will be made under the EQC's rulemaking procedures in OAR 340 division 11 of this chapter and any other requirements contained in the SIP and will be submitted to the EPA for approval. The SIP was last modified by the EQC on January 21July 22-23, 2021.

(3) Notwithstanding any other requirement contained in the SIP, DEQ may:

(a) Submit to the EPA any permit condition implementing a rule that is part of the federallyapproved SIP as a source-specific SIP revision after DEQ has complied with the public hearings provisions of 40 C.F.R. 51.102; and

(b) Approve the standards submitted by LRAPA if LRAPA adopts verbatim, other than nonsubstantive differences, any standard that the EQC has adopted, and submit the standards to EPA for approval as a SIP revision.

(4) Revisions to the State of Oregon Clean Air Act Implementation Plan become federally enforceable upon approval by the EPA. If any provision of the federally approved State Implementation Plan conflicts with any provision adopted by the EQC, DEQ must enforce the more stringent provision.

Statutory/Other Authority: 468A & ORS 468.020 Statutes/Other Implemented: ORS 468A.035 & 468A.135 History:

DEQ 1-2021, amend filed 01/21/2021, effective 01/21/2021 DEQ 21-2020, amend filed 11/19/2020, effective 11/19/2020 DEQ 17-2020, amend filed 09/21/2020, effective 09/21/2020 DEQ 18-2019, amend filed 07/19/2019, effective 07/19/2019 DEQ 14-2019, amend filed 05/17/2019, effective 05/17/2019 DEQ 4-2019, amend filed 01/24/2019, effective 01/24/2019 DEQ 197-2018, amend filed 11/16/2018, effective 11/16/2018 DEQ 192-2018, amend filed 09/14/2018, effective 09/14/2018 DEQ 190-2018, amend filed 07/13/2018, effective 07/13/2018 DEO 11-2018, amend filed 03/23/2018, effective 03/23/2018 DEQ 7-2017, f. & cert. ef. 7-13-17 DEQ 2-2017, f. & cert. ef. 1-19-17 DEQ 14-2015, f. & cert. ef. 12-10-15 DEQ 10-2015, f. & cert. ef. 10-16-15 DEQ 7-2015, f. & cert. ef. 4-16-15 DEQ 6-2015, f. & cert. ef. 4-16-15 DEQ 7-2014, f. & cert. ef. 6-26-14 DEQ 6-2014, f. & cert. ef. 3-31-14 DEQ 5-2014, f. & cert. ef. 3-31-14 DEQ 4-2014, f. & cert. ef. 3-31-14 DEQ 1-2014, f. & cert. ef. 1-6-14 DEQ 12-2013, f. & cert. ef. 12-19-13 DEQ 11-2013, f. & cert. ef. 11-7-13 DEQ 4-2013, f. & cert. ef. 3-27-13 DEO 10-2012, f. & cert. ef. 12-11-12 DEQ 7-2012, f. & cert.ef 12-10-12 DEO 1-2012, f. & cert. ef. 5-17-12 DEQ 18-2011, f. & cert. ef. 12-21-11 DEQ 5-2011, f. 4-29-11, cert. ef. 5-1-11 DEQ 2-2011, f. 3-10-11, cert. ef. 3-15-11 DEQ 1-2011, f. & cert. ef. 2-24-11 DEO 14-2010, f. & cert. ef. 12-10-10 DEO 5-2010, f. & cert. ef. 5-21-10 DEQ 2-2010, f. & cert. ef. 3-5-10 DEO 8-2009, f. & cert. ef. 12-16-09 DEQ 3-2009, f. & cert. ef. 6-30-09 DEO 15-2008, f. & cert. ef 12-31-08 DEQ 14-2008, f. & cert. ef. 11-10-08 DEQ 12-2008, f. & cert. ef. 9-17-08 DEQ 11-2008, f. & cert. ef. 8-29-08 DEO 5-2008, f. & cert. ef. 3-20-08 DEO 8-2007, f. & cert. ef. 11-8-07 DEQ 4-2007, f. & cert. ef. 6-28-07

DEQ 3-2007, f. & cert. ef. 4-12-07 DEQ 4-2006, f. 3-29-06, cert. ef. 3-31-06 DEQ 2-2006, f. & cert. ef. 3-14-06 DEQ 9-2005, f. & cert. ef. 9-9-05 DEQ 7-2005, f. & cert. ef. 7-12-05 DEQ 4-2005, f. 5-13-05, cert. ef. 6-1-05 DEQ 2-2005, f. & cert. ef. 2-10-05 DEQ 1-2005, f. & cert. ef. 1-4-05 DEQ 10-2004, f. & cert. ef. 12-15-04 DEQ 1-2004, f. & cert. ef. 4-14-04 DEQ 19-2003, f. & cert. ef. 12-12-03 DEQ 14-2003, f. & cert. ef. 10-24-03 DEQ 5-2003, f. & cert. ef. 2-6-03 DEQ 11-2002, f. & cert. ef. 10-8-02 DEQ 5-2002, f. & cert. ef. 5-3-02 DEQ 4-2002, f. & cert. ef. 3-14-02 DEQ 17-2001, f. & cert. ef. 12-28-01 DEQ 16-2001, f. & cert. ef. 12-26-01 DEQ 15-2001, f. & cert. ef. 12-26-01 DEQ 6-2001, f. 6-18-01, cert. ef. 7-1-01 DEQ 4-2001, f. & cert. ef. 3-27-01 DEQ 2-2001, f. & cert. ef. 2-5-01 DEQ 21-2000, f. & cert. ef. 12-15-00 DEQ 20-2000 f. & cert. ef. 12-15-00 DEQ 17-2000, f. & cert. ef. 10-25-00 DEQ 16-2000, f. & cert. ef. 10-25-00 DEQ 13-2000, f. & cert. ef. 7-28-00 DEQ 8-2000, f. & cert. ef. 6-6-00 DEQ 6-2000, f. & cert. ef. 5-22-00 DEO 2-2000, f. 2-17-00, cert. ef. 6-1-01 DEQ 15-1999, f. & cert. ef. 10-22-99 DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-020-0047 DEQ 10-1999, f. & cert. ef. 7-1-99 DEQ 6-1999, f. & cert. ef. 5-21-99 DEO 5-1999, f. & cert. ef. 3-25-99 DEQ 1-1999, f. & cert. ef. 1-25-99 DEQ 21-1998, f. & cert. ef. 10-12-98 DEQ 20-1998, f. & cert. ef. 10-12-98 DEQ 17-1998, f. & cert. ef. 9-23-98 DEO 16-1998, f. & cert. ef. 9-23-98 DEQ 15-1998, f. & cert. ef. 9-23-98 DEQ 10-1998, f. & cert. ef. 6-22-98 DEQ 24-1996, f. & cert. ef. 11-26-96 DEQ 23-1996, f. & cert. ef. 11-4-96 DEO 22-1996, f. & cert. ef. 10-22-96 DEQ 19-1996, f. & cert. ef. 9-24-96

DEQ 15-1996, f. & cert. ef. 8-14-96 DEQ 8-1996(Temp), f. & cert. ef. 6-3-96 DEQ 20-1995 (Temp), f. & cert. ef. 9-14-95 DEQ 19-1995, f. & cert. ef. 9-1-95 DEQ 17-1995, f. & cert. ef. 7-12-95 DEQ 14-1995, f. & cert. ef. 5-25-95 DEQ 10-1995, f. & cert. ef. 5-1-95 DEQ 9-1995, f. & cert. ef. 5-1-95 DEQ 25-1994, f. & cert. ef. 11-2-94 DEQ 15-1994, f. 6-8-94, cert. ef. 7-1-94 DEQ 14-1994, f. & cert. ef. 5-31-94 DEQ 5-1994, f. & cert. ef. 3-21-94 DEO 1-1994, f. & cert. ef. 1-3-94 DEQ 19-1993, f. & cert. ef. 11-4-93 DEQ 17-1993, f. & cert. ef. 11-4-93 DEQ 16-1993, f. & cert. ef. 11-4-93 DEQ 15-1993, f. & cert. ef. 11-4-93 DEQ 12-1993, f. & cert. ef. 9-24-93 DEQ 8-1993, f. & cert. ef. 5-11-93 DEQ 4-1993, f. & cert. ef. 3-10-93 DEQ 27-1992, f. & cert. ef. 11-12-92 DEQ 26-1992, f. & cert. ef. 11-2-92 DEQ 25-1992, f. 10-30-92, cert. ef. 11-1-92 DEQ 20-1992, f. & cert. ef. 8-11-92 DEQ 19-1992, f. & cert. ef. 8-11-92 DEO 7-1992, f. & cert. ef. 3-30-92 DEQ 3-1992, f. & cert. ef. 2-4-92 DEO 1-1992, f. & cert. ef. 2-4-92 DEQ 25-1991, f. & cert. ef. 11-13-91 DEO 24-1991, f. & cert. ef. 11-13-91 DEQ 23-1991, f. & cert. ef. 11-13-91 DEQ 22-1991, f. & cert. ef. 11-13-91 DEQ 21-1991, f. & cert. ef. 11-13-91 DEQ 20-1991, f. & cert. ef. 11-13-91 DEQ 19-1991, f. & cert. ef. 11-13-91 DEQ 2-1991, f. & cert. ef. 2-14-91 DEQ 31-1988, f. 12-20-88, cert. ef. 12-23-88 DEQ 21-1987, f. & cert. ef. 12-16-87 DEQ 8-1987, f. & cert. ef. 4-23-87 DEO 5-1987, f. & cert. ef. 3-2-87 DEQ 4-1987, f. & cert. ef. 3-2-87 DEQ 21-1986, f. & cert. ef. 11-7-86 DEQ 20-1986, f. & cert. ef. 11-7-86 DEQ 10-1986, f. & cert. ef. 5-9-86 DEO 5-1986, f. & cert. ef. 2-21-86 DEQ 12-1985, f. & cert. ef. 9-30-85

DEQ 3-1985, f. & cert. ef. 2-1-85 DEQ 25-1984, f. & cert. ef. 11-27-84 DEQ 18-1984, f. & cert. ef. 10-16-84 DEQ 6-1983, f. & cert. ef. 4-18-83 DEQ 1-1983, f. & cert. ef. 1-21-83 DEQ 21-1982, f. & cert. ef. 10-27-82 DEQ 14-1982, f. & cert. ef. 7-21-82 DEQ 11-1981, f. & cert. ef. 3-26-81 DEQ 22-1980, f. & cert. ef. 3-26-80 DEQ 21-1979, f. & cert. ef. 7-2-79 DEQ 19-1979, f. & cert. ef. 6-25-79 DEQ 54, f. 6-21-73, cert. ef. 7-1-73 DEQ 35, f. 2-3-72, cert. ef. 2-15-72

Division 223 REGIONAL HAZE RULES

340-223-0010

Purpose

OAR 340-223-0020 through 340-223-0080130 establish the process and criteria for identifying reductions of pollutants from stationary sources that reduce visibility and contribute to regional haze in Class I areas, for the purpose of maintaining reasonable progress and other requirements associated with Oregon's implementation of the federal regional haze rule in 40 CFR 51.308 (2017)requirements for certain sources emitting air pollutants that reduce visibility and contribute to regional haze in Class I areas, for the purpose of implementing Best Available Retrofit Technology (BART) requirements and other requirements associated with the federal Regional Haze Rules in 40 CFR § 51.308, as in effect on December 9, 2010.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.]

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History: DEQ 14-2010, f. & cert. ef. 12-10-10 DEQ 3-2009, f. & cert. ef. 6-30-09

340-223-0020 Definitions

The definitions in OAR 340-200-0020 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020, the definition in this rule <u>takes</u> precedence applies to this division.

(1) "BART-eligible source" means any source determined by the Department to meet the criteria for a BART-eligible source established in Appendix Y to 40 CFR Part 51, "Guidelines for BART Determinations Under the Regional Haze Rule", and in accordance with the federal Regional Haze Rules under 40 CFR § 51.308(e), as in effect on December 9, 2010"Emissions unit" means any part or activity of a source that emits or has the potential to emit more than 20 tons of any single or combination of round II regional haze pollutants.

(2) "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 that 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 or unit, the remaining useful life of the source or unit, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology"Round II regional haze pollutants" means the pollutants DEQ has identified in round II of regional haze that contribute to visibility impacts in Class I areas, which are sulfur dioxide, particulate matter of a nominal diameter of 10 microns or less, and nitrogen oxides.

(3) "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):

Deciview haze index=10ln(bext/10 Mm-1)

Where bext the atmospheric light extinction coefficient, expressed in inverse megameters (Mm-1) "Round II of regional haze" means the combination of information collection, technical demonstrations, control strategies, commitments, rules, orders, and any other actions that make up DEQ's development and implementation of the 2018 through 2028 long-term strategy for reducing haze in Oregon's Class I areas that will be submitted or that have been submitted to EPA as part of the state implementation plan.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.]

<u>[NOTE: View a PDF of Appendix Y to 40 C.F.R. Part 51 by clicking on "Tables" link below.</u>]

[ED. NOTE: To view attachments referenced in rule text, click here to view rule.]

(4) "Dry sorbent injection pollution control system" means a pollution control system that reduces sulfur dioxide emissions by combining a dry alkaline reagent directly with the boiler

exhaust gas stream to enable the reagent to adsorb sulfur dioxide and be collected by the existing electrostatic precipitator.

(5) "Subject to BART" means a BART-eligible source that based on air quality dispersion modeling causes visibility impairment equal to or greater than 0.5 deciview in any Class I area, at the 98th percentile for both a three-year period and one-year period.

(6) "Ultra-low sulfur coal" means coal that contains no more than 0.25 lb sulfur/mmBtu heat input on average.

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History: DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019 DEQ 14-2010, f. & cert. ef. 12-10-10 DEQ 3-2009, f. & cert. ef. 6-30-09

<u>340-223-0030</u>

BART Requirements for the Foster-Wheeler Boiler at the Boardman Coal-Fired Power Plant (Federal Acid Rain Program Facility ORISPL Code 6106)

(1) Emissions limits:

(a) Between July 1, 2011 and December 31, 2020, nitrogen oxide emissions must not exceed 0.23 lb/mmBtu heat input as a 30-day rolling average, provided that:

(A) If the source submitted a complete application for construction and/or operation of pollution control equipment to satisfy the emissions limit in subsection (1)(a) at least eight months prior to the compliance date of July 1, 2011, and the Department has not approved or denied the application by the compliance date, the compliance date is extended until the Department approves or disapproves the application, but may not be extended to a date more than five years from the date that the United States Environmental Protection Agency approves a revision to the State of Oregon Clean Air Act Implementation Plan that incorporates OAR 340-223-0030; and

(B) If it is demonstrated by December 31, 2011 that the emissions limit in subsection (1)(a) cannot be achieved with combustion controls, the Department by order may grant an extension of compliance to July 1, 2013.

(b) Except as provided in section (3) below:

(A) Between July 1, 2014 and June 30, 2018, sulfur dioxide emissions must not exceed 0.40 lb/mmBtu heat input as a 30-day rolling average; and

(B) Between July 1, 2018 and December 31, 2020, sulfur dioxide emissions must not exceed 0.30 lb/mmBtu heat input as a 30-day rolling average.

(c) Between July 1, 2014 and December 31, 2020, particulate matter emissions must not exceed 0.040 lb/mmBtu heat input as determined by compliance source testing.

(d) During periods of startup and shutdown, the following emissions limits apply instead of the limits in subsections (a) through (c):

(A) Sulfur dioxide emissions must not exceed 1.20 lb/mmBtu, as a 3-hour rolling average;

(B) Nitrogen oxide emissions must not exceed 0.70 lb/mmBtu, as a 3-hour rolling average; and

(C) Particulate matter emissions must be minimized to extent practicable pursuant to approved startup and shutdown procedures in accordance with OAR 340-214-0310.

(e) The Foster-Wheeler boiler at the source must permanently cease burning coal by no later than December 31, 2020. Notwithstanding the definition of netting basis in OAR 340-200-0020, and the process for reducing plant site emission limits in OAR 340-222-0043, the netting basis and PSELs for the boiler are reduced to zero upon the date on which the boiler permanently ceases burning coal, and prior to that date the netting basis and PSELs for the boiler apply only to physical changes or changes in the method of operation of the source for the purpose of complying with emission limits applicable to the boiler.

(2) Studies to evaluate compliance with the sulfur dioxide emissions limits in paragraphs (1)(b)(A) (B), and the potential side effects of compliance with those limits, if required by section (3), must be completed as follows:

(a) A plan to evaluate the sulfur dioxide emissions limit in paragraph (1)(b)(A) must be submitted for Department approval by July 1, 2011, and the results of the evaluation must be submitted to the Department by July 1, 2013;

(b) A plan to evaluate the sulfur dioxide emissions limit in paragraph (1)(b)(B) must be submitted for Department approval by July 1, 2015, and the results of the evaluation must be submitted to the Department by July 1, 2017; and

(c) Each study pursuant to this section (2) must:

(A) Evaluate whether a dry sorbent injection pollution control system is technically infeasible, will prevent compliance with mercury emissions limits under OAR 340-228-0606, or cause a significant air quality impact (as that term is defined in 340-200-0020) for PM10 or PM2.5;

(B) Evaluate a range of commercially available sorbent materials that could be used in a dry sorbent injection pollution control system to reduce sulfur dioxide emissions;

(C) Evaluate the potential for significant air quality impacts for PM10 or PM2.5 as follows:

(i) Perform modeling consistent with the requirements of OAR 340-225-0050(1) with screening meteorological data containing conservative meteorological assumptions; or

(ii) If modeling with screening meteorological data pursuant to subparagraph (i) demonstrates that significant air quality impacts for PM10 or PM2.5 will occur, perform modeling with site specific meteorological data obtained from the installation of a meteorological monitoring station, including one year of monitoring data for each study. The meteorological monitoring station must be installed, certified, operated and maintained, and the output of the meteorological monitoring station must be recorded, in accordance with a plan approved by the Department;

(D) Evaluate the use of other sulfur dioxide pollution control systems of equal or lower cost as a dry sorbent injection pollution control system, including but not limited to the use of ultra-low sulfur coal, if the study demonstrates that the use of a dry sorbent injection pollution control system is technically infeasible, will prevent compliance with mercury emissions limits under OAR 340-228-0606, or will cause a significant air quality impact (as that term is defined in OAR 340-200-0020) for PM10 or PM2.5; and

(E) If applicable, propose an emissions limit for sulfur dioxide based on a 30-day rolling average that exceeds the limits listed in paragraphs (1)(b)(A) (B), based upon the reduction of sulfur dioxide emissions to the maximum extent feasible through the use of a dry sorbent injection pollution control system or another sulfur dioxide pollution control system of equal or lower cost, including but not limited to the use of ultra-low sulfur coal, provided that the emissions limit may not exceed 0.55 lb/mmBtu heat input as a 30-day rolling average.

(3) Between July 1, 2014 and December 31, 2020, sulfur dioxide emissions may exceed the limit listed in paragraph (1)(b)(A) or (B), or both, if:

(a) Studies have been submitted pursuant to section (2);

(b) Compliance with the applicable emissions limit or limits would:

(A) Be technically infeasible;

(B) Prevent compliance with mercury emissions limits under OAR 340-228-0606; or

(C) Cause a significant air quality impact, as that term is defined in OAR 340-200-0020, for PM10 or PM2.5;

(c) Sulfur dioxide emissions are otherwise reduced to the maximum extent feasible as described in subsection (2)(c); and

(d) The source's Oregon Title V Operating Permit is modified to include a federally enforceable permit limit reflecting the requirements of subsection (2)(c), prior to the compliance date for the sulfur dioxide emissions limit in paragraph (1)(b)(A) or (B) that will be exceeded; provided that if the source's Oregon Title V Operating Permit has not been modified prior to the applicable compliance date, sulfur dioxide emissions may exceed the emissions limit in paragraph (1)(b)(A) or (B) if the source submitted a complete application to modify its Oregon Title V Operating Permit at least eight months prior to the applicable compliance date and sulfur dioxide emissions do not exceed the emissions limit proposed in its application (which may not exceed 0.55 lb/mmBtu heat input as a 30-day rolling average).

(4) Compliance demonstration. Using the procedures specified in section (5) of this rule:

(a) Compliance with a 30-day rolling average limit must be demonstrated within 180 days of the compliance date specified in section (1) of this rule; and

(b) Compliance with any 30-day rolling average limit for sulfur dioxide that may be established pursuant to subsection (3)(c) must be demonstrated within 180 days of the compliance date for the limit in paragraph (1)(b)(A) or (B) that is superseded by the emissions limit established pursuant to subsection (3)(c).

(5) Compliance Monitoring and Testing.

(a) Compliance with the emissions limits in subsections (1)(a), (b) and (d)(A) (B), and with any emissions limit for sulfur dioxide that may be established pursuant to subsection (3)(c), must be determined with a continuous emissions monitoring system (CEMS) installed, operated, calibrated, and maintained in accordance with the acid rain monitoring requirements in 40 CFR Part 75 as in effect on December 9, 2010.

(A) The hourly emissions rate in terms of lb/mmBtu heat input must be recorded each operating hour, including periods of startup and shutdown.

(B) The daily average emissions rate must be determined for each boiler operating day using the hourly emissions rates recorded in (A), excluding periods of startup and shutdown.

(C) 30-day rolling averages must be determined using all daily average emissions rates recorded in (B) whether or not the days are consecutive.

(D) The daily average emission rate is calculated for any calendar day in which the boiler combusts any fuel. An operating hour means a clock hour during which the boiler combusts any fuel, either for part of the hour or for the entire hour.

(b) Compliance with the particulate matter emissions limit in subsection (1)(c) must be determined by EPA Methods 5 and 19 as in effect on December 9, 2010.

(A) An initial particulate matter source test must be conducted by January 1, 2015.

(B) Subsequent tests must be conducted in accordance with a schedule specified in the source's Oregon Title V Operating Permit, but not less than once every 5 years.

(C) All testing must be performed in accordance with the Department's Source Sampling Manual as in effect on December 9, 2010. [NOTE: DEQ manuals are published with OAR 340-200-0035.]

(6) Notifications and Reports.

(a) The Department must be notified in writing within 7 days after any control equipment (including combustion controls) used to comply with emissions limits in section (1), and with any emissions limit for sulfur dioxide that may be established pursuant to subsection (3)(c), begins operation.

(b) For nitrogen oxide and sulfur dioxide emissions limits in section (1) based on a 30-day rolling average, a compliance status report, including CEMS data, must be submitted within 180 days of the compliance dates specified in section (1).

(c) For any sulfur dioxide emissions limit that may be established pursuant to subsection (3)(c), a compliance status report, including CEMS data, must be submitted within 180 days of the compliance date for the limit in paragraph (1)(b)(A) or (B) that is superseded by the emissions limit established pursuant to subsection (3)(c).

(d) For particulate matter, a compliance status report, including a source test report, must be submitted within 60 days of completing the initial compliance test and all subsequent tests as specified in subsection (5)(b).

(e) The Department must be notified in writing within 7 days of the date upon which the boiler permanently ceases burning coal.

(7) The following provisions of this rule constitute BART requirements for the Foster-Wheeler Boiler: subsection (1)(a), paragraph (1)(b)(A), subsections (1)(c) (e), (2)(a) and (2)(c), and sections (3) (6).

(8) The following provisions of this rule constitute additional requirements pursuant to the federal Regional Haze Rules under 40 CFR § 51.308(e) for the Foster-Wheeler Boiler: paragraph (1)(b)(B), subsections (2)(b) and (2)(c), and sections (3) (6).

[NOTE: View a PDF of EPA Methods by clicking on "Tables" link below.]

[ED. NOTE: To view attachments referenced in rule text, click here to view rule.]

 Statutory/Other Authority: ORS 468 & 468A

 Statutes/Other Implemented: ORS 468A.025

 History:

 DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019

 DEQ 14-2010, f. & cert. ef. 12-10-10

 DEQ 3-2009, f. & cert. ef. 6-30-09

<u>340-223-0040</u> Federally Enforceable Permit Limits

(1) A BART eligible source that would be subject to BART may accept a federally enforceable permit limit or limits that reduces the source's emissions and prevents the source from being subject to BART.

(2) Any BART-eligible source that accepts a federally enforceable permit limit or limits as described in section (1) to prevent the source from being subject to BART, and that subsequently proposes to terminate its federally enforceable permit limit or limits, and that as a result will increase its emissions and become subject to BART, must submit a BART analysis to the Department and install BART as determined by the Department prior to terminating the federally enforceable permit limit or limits.

(3) The Foster-Wheeler boiler at The Amalgamated Sugar Company plant in Nyssa, Oregon (Title V permit number 23-0002) is a BART-eligible source, and air quality dispersion modeling demonstrates that it would be subject to BART while operating. However, it is not operating as of December 9, 2010, and therefore is not subject to BART. Prior to resuming operation, the owner or operator of the source must either:

(a) Submit a BART analysis and install BART as determined by the Department by no later than five years from the date that the United States Environmental Protection Agency approves a revision to the State of Oregon Clean Air Act Implementation Plan that incorporates OAR chapter 340, division 223, or before resuming operation, whichever is later; or

(b) Obtain and comply with a federally enforceable permit limit or limits assuring that the source's emissions will not cause the source to be subject to BART.

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History: DEQ 14-2010, f. & cert. ef. 12-10-10 DEQ 3-2009, f. & cert. ef. 6-30-09

<u>340-223-0050</u>

Alternative Regional Haze Requirements for the Foster-Wheeler Boiler at the Boardman Coal-Fired Power Plant (Federal Acid Rain Program Facility ORISPL Code 6106)

(1) The owner and operator of the Foster-Wheeler boiler at the Boardman coal-fired power plant may elect to comply with OAR 340-223-0060 and 340-223-0070, or with 340-223-0080, in lieu of complying with OAR 340-223-0030, if the owner or operator provides written notification to the Director by no later than July 1, 2014. The written notification must identify which rule of the two alternatives the owner or operator has chosen to comply

with. The owner or operator may not change its chosen method of compliance after July 1, 2014.

(2) Compliance with OAR 340-223-0080 in lieu of complying with 340-223-0030 is allowed only if the Foster-Wheeler boiler at the Boardman coal-fired power plant permanently ceases to burn coal within five years of the approval by the United States Environmental Protection Agency (EPA) of the revision to the State of Oregon Clean Air Act Implementation Plan that incorporates OAR chapter 340, division 223. If the boiler has not permanently ceased burning coal by that date, the owner and operator shall be liable for violating OAR 340-223-0030 for each day beginning July 1, 2014 on which the owner or operator did not comply with OAR 340-223-0030. This liability shall include, but is not limited to, civil penalties pursuant to OAR chapter 340, division 12, which includes penalties for the economic benefit of operating the facility without the required pollution controls.

(3) If, by December 31, 2011, the EPA fails to approve a revision to the State of Oregon Clean Air Act Implementation Plan that incorporates OAR 340-223-0030 (concerning BART requirements based upon permanently ceasing the burning of coal in the Foster-Wheeler Boiler by December 31, 2020), or 340-223-0060 and 340-223-0070, then the compliance date of July 1, 2014 in 340-223-0060(2)(b) and (c) (sulfur dioxide and particulate matter emissions limits) is delayed until three years from the date of EPA approval.

(4) Notwithstanding sections (1) and (3), if the EPA approves a revision to the State of Oregon Clean Air Act Implementation Plan that incorporates OAR 340-223-0030 (concerning BART requirements based upon permanently ceasing the burning of coal in the Foster-Wheeler Boiler by December 31, 2020), then OAR 340-223-0060 and 340-223-0070 are repealed, compliance with 340-223-0060 and 340-223-0070 in lieu of complying with 340-223-0030 is no longer an alternative, and compliance with 340-223-0030 or 340-223-0080 is required.

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History: DEQ 14-2010, f. & cert. ef. 12-10-10 DEQ 3-2009, f. & cert. ef. 6-30-09

<u>340-223-0060</u>

Alternative BART Requirements for the Foster-Wheeler Boiler at the Boardman Coal-Fired Power Plant (Federal Acid Rain Program Facility ORISPL Code 6106) Based Upon Operation Until 2040 or Beyond

(1) Subject to OAR 340-223-0050, the owner or operator of the Foster-Wheeler boiler at the Boardman coal-fired power plant may elect to comply with this rule and 340-223-0070 in lieu of compliance with OAR 340-223-0030.

(2) Emissions limits:

(a) On and after July 1, 2011, nitrogen oxide emissions must not exceed 0.28 lb/mmBtu heat input as a 30-day rolling average and 0.23 lb/mmBtu heat input as a 12-month rolling average.

(A) If it is demonstrated by July 1, 2012 that the emissions limits in (a) cannot be achieved with combustion controls, the Department may grant an extension of compliance to July 1, 2014.

(B) If an extension is granted, on and after July 1, 2014 the nitrogen oxide emissions must not exceed 0.19 lb/mm Btu heat input as a 30-day rolling average, and the emissions limits of 0.28 lb/mmBtu heat input as a 30-day rolling average and 0.23 lb/mmBtu heat input as a 12-month rolling average no longer apply.

(b) On and after July 1, 2014, sulfur dioxide emissions must not exceed 0.12 lb/mmBtu heat input as a 30-day rolling average.

(c) On and after July 1, 2014, particulate matter emissions must not exceed 0.012 lb/mmBtu heat input as determined by compliance source testing.

(d) During periods of startup and shutdown, the following emissions limits apply instead of the limits in subsections (2)(a) through (c):

(A) Sulfur dioxide emissions must not exceed 1.20 lb/mmBtu, as a 3-hour rolling average;

(B) Nitrogen oxide emissions must not exceed 0.70 lb/mmBtu, as a 3-hour rolling average; and

(C) Particulate matter emissions must be minimized to extent practicable pursuant to approved startup and shutdown procedures in accordance with OAR 340-214-0310.

(3) Compliance demonstration. Using the procedures specified in section (4) of this rule:

(a) Compliance with a 30-day rolling average limit must be demonstrated within 180 days of the compliance date specified in section (2) of this rule.

(b) Compliance with a 12-month rolling average must be demonstrated within 12 months of the compliance date specified in section (2) of this rule.

(4) Compliance Monitoring and Testing.

(a) Compliance with the emissions limits in (2)(a), (b) and (d)(A)-(B) must be determined with a continuous emissions monitoring system (CEMS) installed, operated, calibrated, and maintained in accordance with the acid rain monitoring requirements in 40 CFR Part 75 as in effect on December 9, 2010.

(A) The hourly emissions rate in terms of lb/mmBtu heat input must be recorded each operating hour, including periods of startup and shutdown.

(B) The daily average emissions rate must be determined for each boiler operating day using the hourly emissions rates recorded in (Λ), excluding periods of startup and shutdown.

(C) 30-day rolling averages must be determined using all daily average emissions rates recorded in (B) whether or not the days are consecutive.

(D) 12-month rolling averages must be determined using calendar month averages based on all daily averages during the calendar month.

(b) Compliance with the particulate matter emissions limit in (2)(c) must be determined by EPA Methods 5 and 19 as in effect on December 9, 2010.

(A) An initial test must be conducted by January 1, 2015.

(B) Subsequent tests must be conducted in accordance with a schedule specified in the Oregon Title V Operating Permit, but not less than once every 5 years.

(C) All testing must be performed in accordance with the Department's Source Sampling Manual as in effect on December 9, 2010. [NOTE: DEQ manual is published with OAR 340-200-0035.]

(7) Notifications and Reports.

(a) The Department must be notified in writing within 7 days after any control equipment (including combustion controls) used to comply with emissions limits in section (2) begin operation.

(b) For nitrogen oxide and sulfur dioxide limits based on a 30-day rolling average, a compliance status report, including CEMS data, must be submitted within 180 days of the compliance dates specified in section (2).

(c) If applicable, a compliance status report for the 12-month rolling average nitrogen oxide limit in section (2)(a) must be submitted by August 1, 2012.

(d) For particulate matter, a compliance status report, including a source test report, must be submitted within 60 days of completing the initial compliance test specified in section (4)(b).

[NOTE: View a PDF of EPA Methods by clicking on "Tables" link below.]

[ED. NOTE: To view attachments referenced in rule text, click here to view rule.]

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History: DEQ 13-2019, amend filed 05/16/2019, effective 05/16/2019 DEQ 14-2010, f. & cert. ef. 12-10-10

<u>340-223-0070</u>

Additional NOx Requirements for the Foster-Wheeler Boiler at the Boardman Coal-Fired Power Plant (Federal Acid Rain Program Facility ORISPL Code 6106) Based Upon Operation Until 2040 or Beyond

(1) Subject to OAR 340-223-0050, the owner or operator of the Foster-Wheeler boiler at the Boardman coal-fired power plant may elect to comply with this rule and 340-223-0060 in lieu of compliance with OAR 340-223-0030.

(2) On and after July 1, 2017, nitrogen oxide emissions must not exceed 0.070 lb/mmBtu heat input as a 30-day rolling average, excluding periods of startup and shutdown.

(3) Compliance with the nitrogen oxide emissions limit in section (2) must be determined with a continuous emissions monitoring system in accordance with OAR 340-223-0060(3)-(4).

(4) The Department must be notified in writing within 7 days after any control equipment used to comply with the emissions limit in section (2) begins operation.

(5) A compliance status report, including CEMS data, must be submitted by January 1, 2018.

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History: DEQ 14-2010, f. & cert. ef. 12-10-10

<u>340-223-0080</u>

Alternative Requirements for the Foster-Wheeler Boiler at the Boardman Coal-Fired Power Plant (Federal Acid Rain Program Facility ORISPL Code 6106) Based Upon Permanently Ceasing the Burning of Coal Within Five Years of EPA Approval of the Revision to the Oregon Clean Air Act State Implementation Plan Incorporating OAR Chapter 340, Division 223.

(1) Subject to OAR 340-223-0050, the owner or operator of the Foster-Wheeler boiler at the Boardman coal-fired power plant may elect to comply with this rule in lieu of compliance with OAR 340-223-0030 if the boiler permanently ceases to burn coal within five years of the approval by the United States Environmental Protection Agency (EPA) of the revision to the State of Oregon Clean Air Act Implementation Plan that incorporates OAR chapter 340, division 223.

(2) Emissions limits:

(a) Beginning July 1, 2011, nitrogen oxide emissions must not exceed 0.23 lb/mmBtu heat input as a 30-day rolling average, provided that:

(A) If the source submitted a complete application for construction and/or operation of pollution control equipment to satisfy the emissions limit in subsection (2)(a) at least eight months prior to the compliance date of July 1, 2011, and the Department has not approved or denied the application by the compliance date, the compliance date is extended until the Department approves or disapproves the application, but may not be extended to a date more than five years from the date that the EPA approves a revision to the State of Oregon Clean Air Act Implementation Plan that incorporates OAR 340-223-0030; and

(B) If it is demonstrated by December 31, 2011 that the emissions limit in subsection (2)(a) cannot be achieved with combustion controls, the Department by order may grant an extension of compliance to July 1, 2013.

(b) During periods of startup and shutdown, the emissions limit in subsection (2)(a) does not apply, and nitrogen oxide emissions must not exceed 0.70 lb/mmBtu, as a 3-hour rolling average.

(c) The Foster-Wheeler boiler at the source must permanently cease burning coal by no later than five years after the approval by the EPA of the revision to the State of Oregon Clean Air Act Implementation Plan that incorporates OAR chapter 340, division 223. Notwithstanding the definition of netting basis in OAR 340-200-0020, and the process for reducing plant site emission limits in OAR 340-222-0043, the netting basis and PSELs for the boiler are reduced to zero upon the date on which the boiler permanently ceases burning coal, and prior to that date the netting basis and PSELs for the boiler apply only to physical changes or changes in the method of operation of the source for the purpose of complying with emission limits applicable to the boiler.

(3) Compliance demonstration. Using the procedures specified in section (4) of this rule, compliance with a 30-day rolling average limit must be demonstrated within 180 days of the compliance date specified in section (2) of this rule.

(4) Compliance Monitoring and Testing. Compliance with the emissions limit in subsection (2)(a) must be determined with a continuous emissions monitoring system (CEMS) installed, operated, calibrated, and maintained in accordance with the acid rain monitoring requirements in 40 CFR Part 75 as in effect on December 9, 2010.

(a) The hourly emission rate in terms of lb/mmBtu heat input must be recorded each operating hour, including periods of startup and shutdown.

(b) The daily average emission rate must be determined for each boiler operating day using the hourly emission rates recorded in (a), excluding periods of startup and shutdown.

(c) 30-day rolling averages must be determined using all daily average emissions rates recorded in (b) whether or not the days are consecutive.

(d) The daily average emission rate is calculated for any calendar day in which the boiler combusts any fuel. An operating hour means a clock hour during which the boiler combusts any fuel, either for part of the hour or for the entire hour.

(5) Notifications and Reports

(a) The Department must be notified in writing within 7 days after any control equipment (including combustion controls) used to comply with emissions limit in subsection (2)(a) begin operation.

(b) A compliance status report, including CEMS data, must be submitted within 180 days of the compliance date specified in section (2).

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History: DEQ 14-2010, f. & cert. ef. 12-10-10

<u>340-223-0100</u> Screening Methodology for Sources for Round II of Regional Haze

(1) The following sources are subject to the requirements of round II of regional haze, contained in OAR 340-223-0110 to OAR 340-223-0130:

(a) Stationary sources with a Title V operating permit; and

(b) That have a Q/d, as determined as provided in subsection (2), of greater than or equal to 5.00.

(2) To determine Q/d, DEQ shall calculate:

(a) A "Q" factor by adding the plant site emission limits for round II regional haze pollutants as stated in the permit for that source as of December 31, 2017;

(b) A "d" factor by determining the source's physical distance to the closest Class 1 area in Oregon or an adjacent state in kilometers, measured in a straight line from the source to the nearest boundary of a Class I area; and

(c) The ratio of Q divided by d for that source.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.]

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History:

<u>340-223-0110</u> Options for Compliance with Round II of Regional Haze

(1) All sources subject to the requirements of round II of regional haze, as determined in OAR 340-223-0100(1), must submit a four factor analysis as required under OAR 340-223-0120(1) and install all controls determined by DEQ to be cost effective for controlling round II regional haze pollutants on the fastest timeline determined by DEQ to be practicable and no later than July 31, 2026 based on the agency record at the time of its decision and in an order issued under OAR 340-223-0130(1) following DEQ's adjustment and review of the four factor analysis.

(2) DEQ may, but is not required to, offer alternative compliance with subsection (1) by entering into a stipulated agreement and final order under which a source agrees to take one of the actions identified in paragraphs (b)(A) through (D). A stipulated agreement and final order shall identify the action that shall be taken by the source and the timeline for the action, which shall be the fastest timeline determined by DEQ to be practicable and no later than July 31, 2026 as well any monitoring, recordkeeping, reporting, or other requirements that DEQ determines are necessary to ensure actions taken by the source are enforceable.

(a) If DEQ chooses not to enter into a stipulated agreement and final order under this subsection (2), a source shall comply with subsection (1).

(b) DEQ may enter into a stipulated agreement and final order in which a source agrees to:

(A) Accept federally enforceable reductions of combined plant site emission limits of round II regional haze pollutants to bring the source's Q/d below 5.00. Notwithstanding OAR 340-222-0040, a source may take a PSEL reduction below the generic PSEL to achieve an overall PSEL of round II regional haze pollutants below a Q/d of 5.00. A source's Q/d will be considered to be brought below 5.00 when Q/d is below 5.00 using the calculation in OAR 340-223-0100(2), except that the Q factor shall be calculated by adding the plant site emission limits for regional haze pollutants as stated in the stipulated agreement and final order;

(B) Install controls identified by the source in a four factor analysis as cost effective for that source for reducing round II regional haze pollutants. DEQ must agree that the controls identified will result in the greatest cost effective emissions reduction at the identified emissions unit and DEQ must establish a timeline for installation of those controls that is the fastest practicable timeline for installation of the identified controls and that is no later than July 31, 2026;

(C) Install controls or reduce emissions for round II regional haze pollutants that DEQ determines, in its sole discretion, provide equivalent emissions reductions to controls that would be identified as cost effective for that source following the adjustment and review of a four factor analysis. DEQ must establish a timeline for installation of those controls that is the fastest practicable timeline for installation of the identified controls and that is no later than July 31, 2026; or

(D) Maintain controls that the source has already installed to control round II regional haze pollutants or maintain reduced emissions of regional haze pollutants that DEQ determines, in its sole discretion, have provided and will continue to provide equivalent emissions reductions to controls that would be identified as cost effective for that source following adjustment and review of a four factor analysis.

(c) The stipulated agreement and final order shall be incorporated into the source's Title V permit or upon permit renewal.

(3) If a source fails to take action as required under subsection (1) and DEQ has not entered into a stipulated agreement and final order with that source under subsection (2), DEQ shall complete a four factor analysis for that source, and the source shall install all controls to control round II regional haze pollutants determined by DEQ to be cost effective and based on the fastest timeline determined by DEQ to be practicable and no later than July 31, 2026 in an order issued under OAR 340-223-0130 based on information compiled by DEQ in the agency record.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.]

<u>340-223-0120</u> Four Factor Analysis

(1) A four factor analysis is an emissions control analysis that shall include:

(a) All emissions units for the source; and

(b) Information sufficient to determine, at each emissions unit:

(A) The costs of any and all controls that could be used to reduce round II regional haze pollutants, including an estimate of the cost per ton of each round II regional haze pollutant reduced and all control technologies in use by similar emission units, either at that source or at other sources or locations;

(B) How soon the source believes it would be practicable to install to install controls identified under paragraph (A);

(C) The energy and non-air quality environmental impacts of installing controls identified under paragraph (A); and

(D) The remaining useful life of each emissions unit.

(2) If DEQ determines that the four factor analysis is inaccurate, inadequate, or insufficient, DEQ may request in writing additional information from the source and may adjust the four factor analysis based on any information submitted or may adjust the four factor analysis

based on other information DEQ determines to be accurate, adequate, and sufficient. DEQ shall place any information submitted or relied on under this subsection into its record.

(3) DEQ may adjust information in the four factor analysis to assist DEQ in conducting a consistent review of submittals. DEQ shall place any information relied on under this subsection into its record.

(4) DEQ shall review the four factor analysis and any additional information that DEQ has placed in the agency record under subsections (2) and (3) to determine which controls, if any, would be cost effective to reduce round II regional haze pollutants for each emissions unit at a source and to determine what is the fastest practicable timeline for installation of the identified controls. In no event shall the timeline determined to be practicable be later than July 31, 2026.

(a) A control is cost effective if DEQ determines that the control will result in a cost of \$10,000 or less per ton of reductions for any single or combination of round II regional haze pollutants.

(b) If multiple controls are cost effective at an emissions unit, DEQ shall identify as cost effective the control that will result in the greatest emissions reduction at the emissions unit.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.]

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History:

<u>340-223-0130</u> <u>Final Orders Ordering Compliance with Round II of Regional Haze</u>

(1) For all sources identified in OAR 340-223-0100(1) that do not enter into a stipulated agreement and final order under OAR 340-223-0110(2), DEQ shall issue a final order no later than August 9, 2021, identifying:

(a) The action that shall be taken by the source pursuant to OAR 340-223-0110(1), as well any monitoring, recordkeeping, reporting, or other requirements that DEQ determines are necessary to ensure any controls or emission limits are actually implemented and are enforceable.

(b) The timeline under which the source shall complete the action in paragraph (a).

(2) The order issued under subsection (1) shall:

(a) Be a contested case order issued in compliance with ORS chapter 183;

(b) Be incorporated into the source's Title V permit in compliance with OAR 340-218-0200(1)(a)(A) or upon permit renewal.

(3) Notwithstanding OAR 340-011-0530(1), a party wishing to request a contested case hearing must do so in writing within ten days of the date of service of the order issued under subsection (1).

(4) In accordance with OAR 340-011-0530(2), due to the complexity of the regional haze program, the request for hearing based on an order issued under subsection (1) must include a written response that admits or denies all factual matters alleged in the notice, and alleges any and all affirmative defenses and the reasoning in support thereof. Due to the complexity, factual matters not denied will be considered admitted, and failure to raise a defense will be a waiver of the defense. New matters alleged in the request for hearing are denied by DEQ unless admitted in subsequent stipulation.

(5) DEQ shall refer all hearing requests received under subsection (3) to the Office of Administrative Hearings within five business days of receipt of the request. The cases shall be heard on an expedited timeline to the greatest extent practicable. All reasonable efforts shall be made for DEQ or the EQC to issue a final order within 90 days of receipt of the hearing request.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan that EQC adopted under OAR 340-200-0040.]

Statutory/Other Authority: ORS 468 & 468A Statutes/Other Implemented: ORS 468A.025 History: