AMENDATORY SECTION (Amending WSR 05-17-169, filed 8/23/05, effective 9/23/05)

WAC 173-415-015 Applicability. (1) In addition to the general applicability of chapter 173-400 WAC to all emission sources, all primary aluminum reduction plants are required to meet the emissions standards of this chapter. Specific emissions standards and requirements listed in this chapter shall supersede the general emissions standards and general requirements in chapter 173-400 WAC.

(2) All primary aluminum reduction plants are required to meet applicable National Emissions Standards for Hazardous Air Pollutants (NESHAP((~~s~~))). New primary aluminum reduction plants must also meet federal New Source Performance Standards (NSPS).

(3) ((~~In this rule, whenever a federal regulation is cited, the most recent version that has been adopted into Washington Administrative Code is the version of the federal regulation that is referenced. These most recent adoptions by reference can be found in chapter 173-400 WAC.~~)) Primary aluminum reduction plants are also subject to chapter 173-481 WAC.

(4) Any federal regulations cited in this rule refer to the version of the federal regulation adopted by reference in WAC 173-400-025.

AMENDATORY SECTION (Amending WSR 05-17-169, filed 8/23/05, effective 9/23/05)

WAC 173-415-020 Definitions. The definitions of terms contained in chapter 173-400 WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, the following words and phrases as used in this chapter((~~,~~)) shall have the following meanings:

(1) "Ecology" means the department of ecology.

(2) "Potline" means a single discreet group of electrolytic reduction cells connected in series, in which alumina is reduced to form aluminum.

((~~(2)~~)) (3) "Primary aluminum reduction plant" means any facility manufacturing aluminum by electrolytic reduction. The primary aluminum reduction plant includes the following processes and their emission control systems: Pitch storage tanks, paste production plant, anode bake furnaces and potlines. For the purposes of this regulation, "primary aluminum reduction plant" is equivalent to "source."

((~~(3)~~)) (4) "Primary emission control system" means the equipment used to capture and remove the gases and particulate matter evacuated directly from the reduction cell ((~~and the emission control device(s) used to remove pollutants~~)) prior to discharge of the cleaned gas to the atmosphere((~~. A roof scrubber is not part of the primary control system~~)).

((~~(4)~~)) (5) "Secondary emission control system" means the equipment used to collect and treat the gases and particulate matter that escape from the reduction cells into the potroom prior to discharge of the cleaned gas to the atmosphere. Roof scrubbers are part of the secondary emission control system.

(6) "Total fluorides (TF)" means elemental fluorine and all fluoride compounds as measured by Methods 13A, 13B or 14A in 40 C.F.R. Part 60 Appendix A or by an EPA approved alternative method.

AMENDATORY SECTION (Amending WSR 05-17-169, filed 8/23/05, effective 9/23/05)

WAC 173-415-030 Emission standards. (1) Fluoride.

(a) The emission of total fluorides from a primary aluminum reduction plant shall meet the ((~~MACT~~)) requirements ((~~specified~~)) in 40 C.F.R. 63 Subpart LL.

(b) In addition to meeting the requirements in (a) of this subsection, the emission of fluorides from a primary aluminum reduction plant shall meet the requirements in chapter 173-481 WAC.

(c) If ((~~the department~~)) ecology has reason to believe that adverse fluoride impacts are occurring ((~~in violation of chapter 173-481 WAC~~)), a primary aluminum reduction plant must establish, in response to a request from ((~~the department~~)) ecology, an ambient air and/or forage monitoring program approved by ((~~the department~~)) ecology as required by WAC 173-481-150.

(2) Particulate. Facilities shall reduce the total emission of particulate matter to the atmosphere from the reduction process (potlines) ((~~shall be reduced~~)) to the lowest level consistent with reasonably available control technology (RACT) for primary aluminum reduction plants. The emission of solid particulate shall not exceed 7.5 grams per kilogram (fifteen pounds per ton) of aluminum produced on a daily basis. Facilities shall calculate aluminum produced ((~~shall be calculated by~~)) using the method in 40 C.F.R. 63.847 (e)(6) used ((~~to determine~~)) for determining aluminum production rate ((~~in 40 C.F.R. 63.847 (e)(6)~~)).

(3) Visible emissions. Visible emissions from any emissions unit in a primary aluminum reduction plant shall not exceed an average twenty percent opacity for more than six consecutive minutes in any sixty-minute period. This provision shall not apply:

(a) When the presence of uncombined water is the only reason for the opacity of the plume to exceed twenty percent; or

(b) When an alternate opacity limit has been established under ((~~RCW 70.94.331 (2)(c)~~)) WAC 173-400-040, 173-400-081, or 173-400-082.

(4) Fugitive emissions. Each primary aluminum reduction plant shall use RACT to prevent fugitive emissions. Fugitive dust is included in fugitive emissions.

(5) Sulfur dioxide.

(a) Total emissions of sulfur dioxide from all emissions units shall not exceed thirty grams of sulfur dioxide per kilogram of aluminum produced on a monthly average (sixty pounds per ton). ((~~Those primary aluminum plants which were in excess of the above sulfur dioxide limit on January 1, 1978, will be allowed to emit at the January 1, 1978, level of emissions provided that the owners or operators did demonstrate to ecology by July 1, 1981, by use of modeling and ambient measurements, that the emissions will not cause the ambient standard to be exceeded, and that the limits are placed in a regulatory order(s).~~))

(b) In no case shall any plant cause or permit the emission of a gas containing sulfur dioxide in excess of one thousand parts per million corrected to dry standard conditions for an hourly average.

(6) Operation and maintenance (O&M). At all times, including periods of abnormal operation and upset conditions, owners and operators shall, to the extent practicable, maintain and operate an affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to ecology, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The means for demonstrating ongoing compliance with good O&M may include, but not be limited to: More frequent source testing, prescriptive procedures or inspections, control values for emissions at values less than the applicable regulatory requirements and that function as an investigative trigger rather than as a limit, collection and efficiency requirements, or the use of CEMs.

(7) Source testing. To demonstrate compliance with this chapter, the testing provisions of chapters 173-400, 173-481 WAC and ((~~MACT~~)) the requirements ((~~as specified~~)) in 40 C.F.R. Part 63, Subpart LL shall be ((~~used as~~)) applicable.

(8) Alternative emission limitation. An owner or operator may request an alternative emission limitation (as defined in WAC 173-400-030) under:

(a) WAC 173-400-081 for an action covered under a notice of construction application; or

(b) WAC 173-400-082 for a permit modification.

AMENDATORY SECTION (Amending WSR 05-17-169, filed 8/23/05, effective 9/23/05)

WAC 173-415-060 Monitoring and reporting. (1) When requested by ((~~the department~~)) ecology, each primary aluminum reduction plant shall conduct routine monitoring of emissions, ambient air, and forage in accordance with a program that has been approved by ((~~the department of~~)) ecology. Facilities shall report results of monitoring ((~~shall be reported~~)) monthly within thirty days of the end of each calendar month. Facilities shall submit source testing results within sixty days of completion of each source testing. In addition to the information required by ((~~the Primary Aluminum MACT,~~)) 40 C.F.R. Part 63, Subpart LL and chapter 173-481 WAC, the approved program shall include data as follows:

(a) Particulate emissions:

(i) Results of all emission sampling conducted during the month for particulates, shall be expressed in units used in the applicable requirements or in units specified in the monitoring plan. ((~~The method of calculating~~))

(ii) Facilities shall determine particulate emissions in units of pounds per ton ((~~shall be as~~)) using the methods specified in the approved monitoring programs.

(iii) For each potline, facilities shall report particulate data ((~~shall be reported~~)) as total particulates and percentage of fluoride ion contained therein. For other units at a primary aluminum reduction

plant, facilities shall report particulate data ((~~shall be reported~~)) as total particulates.

(iv) Compliance with WAC 173-415-030(2) shall be determined by measurements of emissions from the potline primary emission control system plus measurements of emissions from the potline ((~~roof~~)) secondary emission control system.

(b) Fluoride emissions: Facilities shall report results of all sampling conducted during the month for fluoride emissions ((~~shall be reported~~)) in pounds of total fluoride per ton of aluminum produced. Facilities shall calculate aluminum produced ((~~shall be calculated by~~)) using the method ((~~used to determine~~)) for determining aluminum production rate in 40 C.F.R. 63.847 (e)(6).

(c) Other emission and ambient air data as specified in the approved monitoring program.

(2) Other data: Each primary aluminum reduction plant shall furnish other data requested by ((~~the department of~~)) ecology to evaluate a plant's emission control program.

(3) Change in raw materials or fuel: Any change or series of changes in raw material or fuel which results in a cumulative increase in emissions of sulfur dioxide of five hundred tons per year or more over that stated in the 1979 emissions inventory shall require the submittal of sufficient information to ((~~the department of~~)) ecology so that the effect upon ambient concentrations of sulfur dioxide can be determined. ((~~The department of~~)) Ecology may issue regulatory orders requiring controls to reduce the effect of such increases.

NEW SECTION

WAC 173-415-075 Excess emissions. The applicable provisions of WAC 173-400-107, or 173-400-108 and 173-400-109 shall apply to all sources to which this chapter is applicable.

Note: WAC 173-400-107 is in effect until the effective date of EPA's removal of the provision from the SIP.