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| **Oregon Rule** | **Requirements** | **EPA Rule** | **Requirements** |
| **340-236-0110** | **Applicability**  OAR 340-236-0100 through 340-236-0150 apply to existing and new primary aluminum plants | **§ 63.840** | **Applicability.**  (a) Except as provided in paragraph (b) of this section, the requirements of this subpart apply to the owner or operator of each new pitch storage tank and new or existing potline, paste production plant, or anode bake furnace associated with primary aluminum production and located at a major source as defined in §63.2. |
| WAS THERE SOMETHING ABOUT “ALL SOURCES?” More inclusive than EPA’s rules? | **340-236-0010**  **Definitions**  The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply to this division. If the same term is defined in this rule and OAR 340-200-0020 or 340-204-0010, the definition in this rule applies to this division.  (1) "All Sources" means:  (a) as used in OAR 340-236-0100 through 340-236-0150 sources including, but not limited to, the reduction process, alumina plant, anode plant, anode baking plant, cast house, and collection, treatment, and recovery systems. Except for the purposes of 340-236-0120(1)(c) and (3)(d), "all sources" does not include sources of fugitive emissions;  (b) as used in OAR 340-236-0200 through 340-236-0230 all equipment, structures, processes, and procedures directly related to or involved in the production of ferronickel from laterite ore excluding open storage areas and mining activities.  (2) "Annual Average" means the arithmetic average of the monthly averages reported to the Department during the twelve most recent consecutive months.  (3) "Anode Baking Plant" means the heating and sintering of pressed anode blocks in oven-like devices, including the loading and unloading of the oven-like devices.  (4) "Anode Plant" means all operations directly associated with the preparation of anode carbon except the anode baking operation. |  |  |
| **340-236-0120** | **Emission Standards**  (1) The emissions from all sources at each primary aluminum plant constructed after January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:  (a) Total fluoride emissions shall not exceed:  (A) A monthly average of 1.2 pounds of fluoride ion per ton of aluminum produced; and  (B) An annual average of 1.0 pound of fluoride ion per ton of aluminum produced; and  (C) 12.5 tons of fluoride ions per month from any single aluminum plant without prior written approval by the Department.  (b) The total of organic and inorganic particulate matter emissions shall not exceed:  (A) A monthly average of 7.0 pounds of particulate per ton of aluminum produced; and  (B) An annual average of 5.0 pounds of particulate per ton of aluminum produced.  (c) Visible emissions from any source shall not exceed ten-(10) percent opacity at any time. | § 63.844 | Emission limits for new or reconstructed sources. (a) *Potlines.* The owner or operator shall not discharge or cause to be discharged into the atmosphere any emissions of TF or POM in excess of the limits in paragraphs (a)(1) and (a)(2) of this section.  (1) *TF limit.* Emissions of TF shall not exceed 0.6 kg/Mg (1.2 lb/ton) of aluminum produced; and  (2) *POM limit.* Emissions of POM from Soderberg potlines shall not exceed 0.32 kg/Mg (0.63 lb/ton) of aluminum produced.  (b) *Paste production plants.* The owner or operator shall meet the requirements in §63.843(b) for existing paste production plants.  (c) *Anode bake furnaces.* The owner or operator shall not discharge or cause to be discharged into the atmosphere any emissions of TF or POM in excess of the limits in paragraphs (c)(1) and (c)(2) of this section.  (1) *TF limit.* Emissions of TF shall not exceed 0.01 kg/Mg (0.02 lb/ton) of green anode; and  (2) *POM limit.* Emissions of POM shall not exceed 0.025 kg/Mg (0.05 lb/ton) of green anode.  (d) *Pitch storage tanks.* Each pitch storage tank shall be equipped with an emission control system designed and operated to reduce inlet emissions of POM by 95 percent or greater.  (MONTHLY AVERAGES?) |
|  |  | § 63.845 | Incorporation of new source performance standards for potroom groups. (h) *Opacity.* Except as provided in paragraph (i) of this section, the owner or operator shall not discharge or cause to be discharged into the atmosphere from the modified potroom group, reconstructed potroom group, or new potroom group any emissions of gases that exhibit 10 percent opacity or greater. |
|  |  | § 60.190 | Applicability and designation of affected facility. (a) The affected facilities in primary aluminum reduction plants to which this subpart applies are potroom groups and anode bake plants.  (b) Except as provided in paragraph (c) of this section, any affected facility under paragraph (a) of this section that commences construction or modification after October 23, 1974, is subject to the requirements of this subpart.  (c) An owner or operator of an affected facility under paragraph (a) of this section may elect to comply with the requirements of this subpart or the requirements of subpart LL of part 63 of this chapter. |
|  |  | § 60.192 | Standard for fluorides. (a) On and after the date on which the initial performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases containing total fluorides, as measured according to §60.195, in excess of:  (1) 1.0 kg/Mg (2.0 lb/ton) of aluminum produced for potroom groups at Soderberg plants: except that emissions between 1.0 kg/Mg and 1.3 kg/Mg (2.6 lb/ton) will be considered in compliance if the owner or operator demonstrates that exemplary operation and maintenance procedures were used with respect to the emission control system and that proper control equipment was operating at the affected facility during the performance tests;  (2) 0.95 kg/Mg (1.9 lb/ton) of aluminum produced for potroom groups at prebake plants; except that emissions between 0.95 kg/Mg and 1.25 kg/Mg (2.5 lb/ton) will be considered in compliance if the owner or operator demonstrates that exemplary operation and maintenance procedures were used with respect to the emission control system and that proper control equipment was operating at the affected facility during the performance test; and  (3) 0.05 kg/Mg (0.1 lb/ton) of aluminum equivalent for anode bake plants |
|  |  | § 60.193 | Standard for visible emissions. (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere:  (1) From any potroom group any gases which exhibit 10 percent opacity or greater, or  (2) From any anode bake plant any gases which exhibit 20 percent opacity or greater. |
| **340-236-0210** | **Laterite Ore Production of Ferronickel** **Applicability**  OAR 340-236-0200 through 340-236-0230 apply to laterite ore production of ferronickel. |  | Subpart UUU—Standards of Performance for Calciners and Dryers in Mineral Industries§ 60.730   Applicability and designation of affected facility. (a) The affected facility to which the provisions of this subpart apply is each calciner and dryer at a mineral processing plant. Feed and product conveyors are not considered part of the affected facility. For the brick and related clay products industry, only the calcining and drying of raw materials prior to firing of the brick are covered.  *Mineral processing plant* means any facility that processes or produces any of the following minerals, their concentrates or any mixture of which the majority (>50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight ??? |
| **340-236-0220** | **Emission Standards**  (1) No source shall have visible emissions in excess of 20 percent opacity, provided that where the presence of uncombined water is the only reason for failure of an emission to meet this requirement, such requirement shall not apply.  (2) The total combined emission of particulate matter from all sources shall not exceed 3.5 pounds per ton of dry laterite ore produced, based upon the average dry laterite ore production rate. |  |  |
| **340-234-0300** | **Neutral Sulfite Semi-Chemical (NSSC) Pulp Mills**  **Applicability**  OAR 340-234-0300 through 340-234-0360 apply to existing and new neutral sulfite semi-chemical (NSSC) pulp mills. | § 63.440 | Applicability. (a) The provisions of this subpart apply to the owner or operator of processes that produce pulp, paper, or paperboard; that are located at a plant site that is a major source as defined in §63.2 of subpart A of this part; and that use the following processes and materials:  (1) Kraft, soda, sulfite, or semi-chemical pulping processes using wood;  (b) The affected source to which the existing source provisions of this subpart apply is as follows:  (1) For the processes specified in paragraph (a)(1) of this section, the affected source is the total of all HAP emission points in the c) The new source provisions of this subpart apply to the total of all HAP emission points at new or existing sources as follows:  (1) Each affected source defined in paragraph (b)(1) of this section that commences construction or reconstruction after December 17, 1993;  (2) Each pulping system or bleaching system for the processes specified in paragraph (a)(1) of this section that commences construction or reconstruction after December 17, 1993;  (3) Each additional pulping or bleaching line at the processes specified in paragraph (a)(1) of this section, that commences construction after December 17, 1993;  (4) Each affected source defined in paragraph (b)(2) of this section that commences construction or reconstruction after March 8, 1996; or  (5) Each additional bleaching line at the processes specified in paragraphs (a)(2) or (a)(3) of this section, that commences construction after March 8, 1996.  pulping and bleaching systems; |
| **340-234-0310** | **Emission Limitations**  (1) Emission of Total Reduced Sulfur (TRS): Spent Liquor Incinerator. The emissions of TRS from any spent liquor incinerator stack shall not exceed 10 ppm and 0.07 gram/kg BLS (0.14 lb/ton BLS) as a daily arithmetic average.  (2) Particulate Matter: Spent Liquor Incinerator. The emissions of particulate matter from any spent liquor incinerator stack shall not exceed:  (a) 3.6 grams/kg BLS (7.2 lbs/ton BLS) as a daily arithmetic average in accordance with the Department **Source Sampling Manual**; and  (b) An opacity equal to or greater than 35 percent for a period exceeding 3 minutes in any one hour, excluding periods when the facility is not operating.  (3) Sulfur Dioxide (S02):  (a) Spent Liquor Incinerator. The emissions of sulfur dioxide from each spent liquor incinerator stack shall not exceed a 3-hr arithmetic average of 10 ppm on a dry gas basis;  (b) Acid Absorption Tower. The emissions of sulfur dioxide from the acid absorption tower stack shall not exceed 20 ppm as a 3-hr arithmetic average on a dry gas basis.  (4) All NSSC sources, with the exception of spent liquor incinerators, shall not exhibit an opacity equal to or greater than 20 percent for a period exceeding three (3) minutes in any one hour. |  | b) The owner or operator of each pulping system using a semi-chemical or soda process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems as specified in paragraphs (c) and (d) of this section.  (1) At each existing affected source, the total HAP emissions from each LVHC system shall be controlled.  (2) At each new affected source, the total HAP emissions from each LVHC system and each pulp washing system shall be controlled.  (c) Equipment systems listed in paragraphs (a) and (b) of this section shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (d) of this section. The enclosures and closed-vent system shall meet the requirements specified in §63.450.  (d) The control device used to reduce total HAP emissions from each equipment system listed in paragraphs (a) and (b) of this section shall:  (1) Reduce total HAP emissions by 98 percent or more by weight; or  (2) Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis; or  (3) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 °C (1600 °F) and a minimum residence time of 0.75 seconds; or  (4) Reduce total HAP emissions using one of the following:  (i) A boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone; or  (ii) A boiler or recovery furnace with a heat input capacity greater than or equal to 44 megawatts (150 million British thermal units per hour) by introducing the HAP emission stream with the combustion air. |
| **340-234-0400** | **Sulfite Pulp Mills**  **Statement of Policy and Applicability**  (2) Applicability. OAR 340-234-0400 through 340-234-0430 apply to existing and new sulfite pulp mills. |  |  |
| **340-234-0410** | **Minimum Emission Standards**  (2) The total average daily emissions from a sulfite pulp mill shall not exceed 20 pounds of sulfur dioxide per ton of air dried unbleached pulp produced and in addition:  (a) The blow system emissions shall not exceed 0.2 pounds of sulfur dioxide per minute per ton of unbleached pulp (charged to digester) on a 15 minute average;  (b) Emissions from the recovery system, acid plant, and other sources shall not exceed 800 ppm of sulfur dioxide as an hourly average.  (3) Mills of less than 110 tons of air dried unbleached pulp per day may be exempted from the limitations of section (2) of this rule provided that a minimum of 80 percent collection efficiency for sulphur dioxide (SO2) is maintained.  (4) The total emission of particulate matter from the recovery furnace stacks shall not exceed four pounds per air dried ton of unbleached pulp produced. | § 63.444 | Standards for the pulping system at sulfite processes. (a) The owner or operator of each sulfite process subject to the requirements of this subpart shall control the total HAP emissions from the following equipment systems as specified in paragraphs (b) and (c) of this section.  (1) At existing sulfite affected sources, the total HAP emissions from the following equipment systems shall be controlled:  (i) Each digester system vent;  (ii) Each evaporator system vent; and  (iii) Each pulp washing system.  (2) At new affected sources, the total HAP emissions from the equipment systems listed in paragraph (a)(1) of this section and the following equipment shall be controlled:  (i) Each weak liquor storage tank;  (ii) Each strong liquor storage tank; and  (iii) Each acid condensate storage tank.  (b) Equipment listed in paragraph (a) of this section shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (c) of this section. The enclosures and closed-vent system shall meet the requirements specified in §63.450. Emissions from equipment listed in paragraph (a) of this section that is not necessary to be reduced to meet paragraph (c) of this section is not required to be routed to a control device.  (c) The total HAP emissions from both the equipment systems listed in paragraph (a) of this section and the vents, wastewater, and condensate streams from the control device used to reduce HAP emissions, shall be controlled as follows.  (1) Each calcium-based or sodium-based sulfite pulping process shall:  (i) Emit no more than 0.44 kilograms of total HAP or methanol per megagram (0.89 pounds per ton) of ODP; or  (ii) Remove 92 percent or more by weight of the total HAP or methanol.  (2) Each magnesium-based or ammonium-based sulfite pulping process shall:  (i) Emit no more than 1.1 kilograms of total HAP or methanol per megagram (2.2 pounds per ton) of ODP; or  (ii) Remove 87 percent or more by weight of the total HAP or methanol. |
|  |  | 63.445 | Standards for the bleaching system. (a) Each bleaching system that does not use any chlorine or chlorinated compounds for bleaching is exempt from the requirements of this section. Owners or operators of the following bleaching systems shall meet all the provisions of this section:  (1) Bleaching systems that use chlorine;  (2) Bleaching systems bleaching pulp from kraft, sulfite, or soda pulping processes that use any chlorinated compounds; or  (3) Bleaching systems bleaching pulp from mechanical pulping processes using wood or from any process using secondary or non-wood fibers, that use chlorine dioxide.  (b) The equipment at each bleaching stage, of the bleaching systems listed in paragraph (a) of this section, where chlorinated compounds are introduced shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (c) of this section. The enclosures and closed-vent system shall meet the requirements specified in §63.450. If process modifications are used to achieve compliance with the emission limits specified in paragraphs (c)(2) or (c)(3), enclosures and closed-vent systems are not required, unless appropriate.  (c) The control device used to reduce chlorinated HAP emissions (not including chloroform) from the equipment specified in paragraph (b) of this section shall:  (1) Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight;  (2) Achieve a treatment device outlet concentration of 10 parts per million or less by volume of total chlorinated HAP; or  (3) Achieve a treatment device outlet mass emission rate of 0.001 kg of total chlorinated HAP mass per megagram (0.002 pounds per ton) of ODP.  (d) The owner or operator of each bleaching system subject to paragraph (a)(2) of this section shall comply with paragraph (d)(1) or (d)(2) of this section to reduce chloroform air emissions to the atmosphere, except the owner or operator of each bleaching system complying with extended compliance under §63.440(d)(3)(ii) shall comply with paragraph (d)(1) of this section.  (1) Comply with the following applicable effluent limitation guidelines and standards specified in 40 CFR part 430:  (i) Dissolving-grade kraft bleaching systems and lines, 40 CFR 430.14 through 430.17;  (ii) Paper-grade kraft and soda bleaching systems and lines, 40 CFR 430.24(a)(1) and (e), and 40 CFR 430.26 (a) and (c);  (iii) Dissolving-grade sulfite bleaching systems and lines, 40 CFR 430.44 through 430.47; or  (iv) Paper-grade sulfite bleaching systems and lines, 40 CFR 430.54(a) and (c), and 430.56(a) and (c).  (2) Use no hypochlorite or chlorine for bleaching in the bleaching system or line. |