

# LANE REGIONAL AIR PROTECTION AGENCY

## TITLE 33

### PROHIBITED PRACTICES AND CONTROL OF SPECIAL CLASSES OF INDUSTRY

#### **Section 33-005 Definitions**

See individual sections for applicable definitions. The definitions in title 12 and in the individual sections in this title apply to this title. If the same term is defined in this title and title 12, the definition in this title applies to this title.

#### **Section 33-045 Gasoline Tanks**

Gasoline tanks with a capacity of 1500 gallons or more may not be installed without a permanent submerged fill pipe or other adequate vapor loss control device in any control area.

#### **Section 33-060 Board Products Industries (Hardboard, Particleboard, Plywood, Veneer)**

##### (1) Definitions

- (a) "Baseline emissions rate" means a source's actual emissions rate during the baseline period, as defined in title 12, expressed as pounds of emissions per thousand square feet of finished product, on a 1/8" basis.
- (b) "Tempering oven" means any facility used to bake hardboard following an oil treatment process.

##### (2) General Provisions

- (a) This section establishes minimum performance and emission standards for veneer, plywood, particleboard and hardboard manufacturing operations.
- (b) Emission limitations established herein are in addition to, and not in lieu of, general emission standards for visible emissions, fuel burning equipment, and refuse burning equipment, except as provided for in subsection 33-060(3).
- (c) Each affected veneer, plywood, particleboard, and hardboard plant must proceed with a progressive and timely program of air pollution control. Each plant must, at the request of LRAPA, submit periodic reports in such form and frequency as directed to demonstrate the progress being made toward full compliance with subsections 33-060(2) through (5).

##### (3) Veneer and Plywood Manufacturing Operations

- (a) Veneer Dryers:

- (A) Consistent with paragraphs 33-060(2)(a) through (c), it is the objective of this section to control air contaminant emissions, including but not limited to condensable hydrocarbons, such that visible emissions from each veneer dryer are limited to a level which does not cause a characteristic "blue haze" to be observable.
- (B) No person may operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed:
  - (i) A daily average operating opacity of ten (10) percent on more than two (2) days within any 12-month period, with the days separated from each other by at least 30 days, as measured by EPA Method 9; and
  - (ii) A maximum opacity of 20 percent at any time as measured by EPA Method 9.
- (C) Particulate emissions from wood-fired veneer dryers may not exceed:
  - (i) 0.75 pounds per 1000 square feet of veneer dried (3/8 inch basis) for units using fuel which has a moisture content equal to or less than 20 percent by weight on a wet basis as measured by ASTM D442-84;
  - (ii) 1.50 pounds per 1000 square feet of veneer dried (3/8 inch basis) for units using fuel which has a moisture content of greater than 20 percent by weight on a wet basis as measured by ASTM D442-84; or
  - (iii) 0.40 pounds per 1000 pounds of steam generated in boilers which exhaust gases to the veneer dryer.
- (D) Exhaust gases from fuel-burning equipment vented to the veneer dryer are exempt from sections 32-020 and 32-030.
- (E) Each veneer dryer must be maintained and operated at all times such that air contaminant generating processes and all contaminant control devices must be at full efficiency and effectiveness so that the emissions of air contaminants are kept at the lowest practicable levels.
- (F) No person may willfully cause or permit the installation or use of any means, such as dilution, which without resulting in a reduction in the total amount of air contaminants emitted, conceals an emission which would otherwise violate this regulation.
- (G) Where effective measures are not taken to minimize fugitive emissions, LRAPA may require that the equipment or structures in which processing,

handling and storage are done be tightly closed, modified, or operated in such a way that air contaminants are minimized, controlled, or removed before discharge to the open air.

(H) LRAPA may require more restrictive emission limits than provided in subparagraphs (a)(A) and (a)(B) for an individual plant upon finding by the Board that the individual plant is located or is proposed to be located in a special problem area. The more restrictive emission limits for special problem areas may be established on the basis of allowable emission expressed in opacity, pounds per hour, or total maximum daily emissions to the atmosphere, or a combination thereof.

- (b) Other Sources: No person may cause to be emitted particulate matter from veneer and plywood mill sources, including but not limited to, sanding machines, saws, presses, barkers, hogs, chippers and other material size reduction equipment, process or space ventilation systems, and truck loading and unloading facilities in excess of a total from all sources within the plant site of an average hourly emission rate (pounds/hour) based on the maximum hourly production capacity of the facility times one (1.0) pound per 1000 square feet of production. Production is expressed in terms of 1000 square feet of plywood or veneer production on a 3/8 inch basis of finished product equivalent. The maximum hourly production capacity is the maximum production capacity for a typical operating shift divided by the number of hours in the operating shift.
- (c) Excepted from paragraph (b) are veneer dryers, fuel burning equipment and refuse burning equipment.
- (d) Compliance with the average hourly emission rate is determined by summing the emissions from the affected sources as determined by emission factor calculations or actual emissions data for a 24-hour period divided by 24.
- (e) Monitoring and Reporting: LRAPA may require any veneer dryer facility to establish an effective program for monitoring the visible air contaminant emissions from each veneer dryer emission point. The program must be reviewed and approved by LRAPA and must consist of the following:
  - (A) A specified minimum frequency for performing visual opacity determinations on each dryer emission point;
  - (B) All data obtained must be recorded on copies of a "Veneer Dryer Visual Emission Monitoring Form" provided by LRAPA or on an alternate form which is approved by LRAPA; and
  - (C) A specified period during which all records must be maintained at the plant site for inspection by authorized representatives of LRAPA.

#### (4) **Particleboard Manufacturing Operations**

- (a) Every person operating or intending to operate a particleboard manufacturing plant must enclose all truck dump and storage areas holding or intended to hold raw materials to prevent windblown particle emissions from these areas to be deposited upon property not under the ownership of said person.
- (b) The temporary storage of raw materials outside the regularly used areas of the plant site is prohibited unless the person who desires to temporarily store such raw materials notifies LRAPA and receives written approval for said storage:
  - (A) When authorized by LRAPA, temporary storage areas must be operated to prevent windblown particulate emissions from being deposited upon property not under the ownership of the person storing the raw materials.
  - (B) Any temporary storage areas authorized by LRAPA may not be operated in excess of six (6) months from the date they are first authorized.
- (c) Any person who proposes to control windblown particulate emissions from truck dump and storage areas other than by enclosure must apply to LRAPA for authorization to utilize alternative controls. The application must describe in detail the plan proposed to control windblown particulate emissions and indicate on a plot plan the nearest location of property not under ownership of the applicant.
- (d) The combined particulate emissions from particleboard plant sources including, but not limited to, hogs, chippers and other material size reduction equipment, process or space ventilation systems, particle dryers, classifiers, presses, sanding machines and materials handling systems must not exceed a plant specific average hourly emission rate, pounds per hour, determined by multiplying the plant production capacity by three (3) pounds per 1,000 square feet. The plant production capacity is the maximum production in terms of 1,000 square feet on a 3/4 inch basis of finished product for a typical operating shift divided by the number of hours in the operating shift.
- (e) Excepted from paragraph (d) are truck dump and storage areas, fuel burning equipment and refuse burning equipment.
- (f) Compliance with the average hourly emission rate is determined by summing the emissions from the affected sources as determined by emission factor calculations or actual emissions data for a 24-hour period divided by 24.

**(5) Hardboard Manufacturing Operations**

- (a) Every person operating or intending to operate a hardboard manufacturing plant must enclose all truck dump and storage areas holding or intended to hold raw materials to prevent windblown particle emissions from these areas to be deposited upon property not under the ownership of said person;
- (b) The temporary storage of raw materials outside the regularly used areas of the

plant site is prohibited unless the person who desires to temporarily store such raw materials first notifies LRAPA and receives written approval:

- (A) When authorized by LRAPA, temporary storage areas must be operated to prevent windblown particulate emissions from being deposited upon property not under the ownership of the person storing the raw materials;
- (B) Any temporary storage areas authorized by LRAPA may not be operated in excess of six (6) months from the date they are first authorized.

(c) **Alternative Means of Control**

Any person who desires to control windblown particulate emissions from truck dump and storage areas other than by enclosure must first apply to LRAPA for authorization to utilize alternative controls. The application must be submitted pursuant to section 34-035 and must describe in detail the plan proposed to control windblown particulate emissions and indicate on a plot plan the nearest location of property not under ownership of the applicant.

- (d) The combined particulate emissions from all emissions sources at the plant must not exceed a plant specific hourly average emission rate determined by multiplying the plant production capacity by one (1.0) pound per 1,000 square feet of production. The plant production capacity is the maximum production in terms of 1000 square feet on a 1/8 inch finished basis for a typical operating shift divided by the number of hours in the operating shift.
- (e) Excepted from paragraph (d) are truck dump and storage areas, fuel burning equipment and refuse burning equipment.
- (f) Compliance with the average hourly emission rate is determined by summing the emissions from the affected sources as determined by emission factor calculations or actual emissions data for a 24-hour period divided by 24.
- (g) No person may operate any hardboard tempering oven unless all gases and vapors emitted from said oven are treated in a fume incinerator capable of raising the temperature of said gases and vapors to at least 1500° F for 0.3 seconds or longer except that specific operating temperatures lower than 1500° F may be approved by LRAPA using the procedures in 40 CFR 63.2262 of the NESHAP for Plywood and Composite Wood Products.

(6) **Testing and Monitoring:** All source tests must be done using the DEQ Source Sampling Manual.

- (a) Veneer dryers, wood particle dryers, fiber dryers and press/cooling vents must be tested using DEQ Method 7.
- (b) Air conveying systems must be tested using DEQ Method 8.

- (c) Fuel burning equipment must be tested using DEQ Method 5. When combusting wood fuel by itself or in combination with any other fuel, the emission results are corrected to 12% CO<sub>2</sub>. When combusting fuels other than wood, the emission results are corrected to 50% excess air.

### **Section 33-065 Charcoal Producing Plants**

- (1) No person may cause or permit the emission of particulate matter from charcoal producing plant sources including, but not limited to, charcoal furnaces (retorts), heat recovery boilers, after combustion chambers, and wood dryers using any portion of the charcoal furnace off-gases as a heat source, in excess of a total from all sources within the plant site of ten (10.0) pounds per ton of charcoal produced (as determined from the retort process) as an annual average.
- (2) Emissions from char storage, briquette making (excluding dryers using furnace off-gases), boilers not using charcoal furnace off-gases, and fugitive sources are excluded in determining compliance with subsection (1).
- (3) Charcoal producing plants as described in subsection (1) are exempt from the limitations of section 32-030 which concern particulate emission concentrations.
- (4) LRAPA may require the installation and operation of instruments and recorders for measuring emissions and/or parameters which affect the emission of air contaminants from sources covered by this rule to ensure that the sources and the air pollution control equipment are operated at all times at their full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable level. The instruments and recorders must be periodically calibrated. The method and frequency of calibration must be approved in writing by LRAPA. The recorded information must be kept for a period of at least one (1) year and must be made available to LRAPA upon request.
- (5) The person responsible for the sources of particulate emissions must conduct or have conducted tests once every year to determine the type, quantity, quality and duration of emissions, and process parameters affecting emissions, in conformance with test methods on file with LRAPA. If this test exceeds the annual emission limitation, then three (3) additional tests are required at three (3) month intervals with all four (4) tests being averaged to determine compliance with the annual standard. No single test may be greater than twice the annual average emission limitation for that source.
  - (a) Source testing must begin within 90 days of the date by which compliance is to be achieved for each individual emission source.
  - (b) These source testing requirements must remain in effect unless waived in writing by LRAPA upon adequate demonstration that the source is consistently operating at lowest practicable levels.

### **Section 33-070 Kraft Pulp Mills**

- (1) Definitions

- (a) "BLS" means black liquor solids, dry weight.
- (b) "Continuous Monitoring" means instrumental sampling of a gas stream on a continuous basis, excluding periods of calibration.
- (c) "Daily arithmetic average" means the average concentration over the 24-hour period in a day, as determined by continuous monitoring equipment or reference method testing. Determinations based on EPA reference methods using the DEQ Source Sampling Manual consist of three (3) separate consecutive runs having a minimum sampling time of 60 minutes each and a maximum sampling time of eight (8) hours each. The three values for concentration (ppm or grains/dscf) are averaged and expressed as the daily arithmetic average which is used to determine compliance with process weight limitations, grain loading or volumetric concentration limitations and to determine daily emission rate. "Day" in this definition is the same as the definition of "day" in title 12.
- (d) "Dry standard cubic meter" means the amount of gas that would occupy a volume of one (1) cubic meter, if the gas were free of uncombined water, at a temperature of 20° C (68° F) and a pressure of 760 mm of mercury (29.92 inches of mercury). The corresponding English unit is dry standard cubic foot.
- (e) "Kraft mill" or "mill" means any industrial operation which uses for a cooking liquor an alkaline sulfide solution containing sodium hydroxide and sodium sulfide in its pulping process.
- (f) "Lime kiln" means any production device in which calcium carbonate is thermally converted to calcium oxide.
- (g) "Non-condensables" means gases and vapors, contaminated with TRS compounds, from the digestion and multiple-effect evaporation processes of a mill.
- (h) "Operations" includes plant, mill or facility.
- (i) "Other sources" as used in section 33-070 means sources of TRS emissions in a kraft mill other than recovery furnaces, lime kilns, smelt dissolving tanks, sewers, drains, categorically insignificant activities and wastewater treatment facilities, including but not limited to:
  - (A) Vents from knotters, brown stock washing systems, evaporators, blow tanks, blow heat accumulators, black liquor storage tanks, black liquor oxidation system, pre-steaming vessels, tall oil recovery operation; and
  - (B) Any vent which is shown to contribute to an identified nuisance condition.
- (j) "Production" as used in section 33-070 means the daily amount of air-dried unbleached pulp, or equivalent, produced during the 24-hour period each calendar day, or LRAPA-approved equivalent period, and expressed in air-dried metric

tons (admt) per day. The corresponding English unit is air-dried tons (adt) per day.

- (k) "Recovery furnace" means the combustion device in which dissolved wood solids are incinerated and pulping chemicals recovered from the molten smelt. For section 33-070, this term includes the direct contact evaporator, if present.
- (l) "Recovery system" means the process by which all or part of the cooking chemicals may be recovered, and cooking liquor regenerated from spent cooking liquor, including evaporation, combustion, dissolving, fortification, and storage facilities associated with the recovery cycle.
- (m) "Smelt dissolving tank vent" means the vent serving the vessel used to dissolve the molten smelt produced by the recovery furnace.

## (2) Statement of Policy

Recent technological developments have enhanced the degree of malodorous emissions control possible for the kraft pulping process. While recognizing that complete malodorous and particulate emission control is not presently possible, consistent with the meteorological and geographical conditions in Oregon, it is hereby declared to be the policy of LRAPA to:

- (a) Require, in accordance with a specific program and time table for all sources at each operating mill, the highest and best practicable treatment and control of atmospheric emissions from kraft mills through the utilization of technically feasible equipment, devices, and procedures. Consideration will be given to the economic life of equipment which, when installed, complies with the highest and best practicable treatment requirement.
- (b) Require degrees and methods of treatment for major and minor emissions points that will minimize emissions of odorous gases and eliminate ambient odor nuisances.
- (c) Require effective monitoring and reporting of emissions and reporting of other data pertinent to air quality or emissions. LRAPA will use these data in conjunction with ambient air data and observation of conditions in the surrounding area to develop and revise emission and ambient air standards, and to determine compliance therewith.
- (d) Encourage and assist the kraft pulping industry to conduct a research and technological development program designed to progressively reduce kraft mill emissions, in accordance with a definite program, including specified objectives and time schedules.

## (3) Emission Limitations

- (a) Emission of Total Reduced Sulfur (TRS):

(A) Recovery Furnaces:

- (i) The emissions of TRS from each recovery furnace placed in operation before January 1, 1969, may not exceed ten (10) ppm and 0.15 kg/metric ton (0.30 pound/ton) of production as daily arithmetic averages;
- (ii) TRS emissions from each recovery furnace placed in operation after January 1, 1969, and before September 25, 1976, or any recovery furnace modified significantly after January 1, 1969, and before September 25, 1976, to expand production, must be controlled such that the emissions of TRS may not exceed five (5) ppm and 0.075 kg/metric ton (0.150 pound/ton) of production as daily arithmetic averages.

(B) Lime Kilns. Lime kilns must be operated and controlled such that emission of TRS may not exceed 20 ppm and 0.05 kg/metric ton (0.10 pound/ton) of production as daily arithmetic averages. This subparagraph applies to those sources where construction was initiated prior to September 25, 1976.

(C) Smelt Dissolving Tanks:

- (i) TRS emissions from each smelt dissolving tank may not exceed 0.0165 gram/kg BLS (0.033 pound/ton BLS) as a daily arithmetic average.

(D) Non-Condensables:

Non-condensables from digesters, multiple-effect evaporators and contaminated condensate stripping must be continuously treated to destroy TRS gases by thermal incineration in a lime kiln or incineration device capable of subjecting the non-condensables to a temperature of not less than 650° C (1200° F) for not less than 0.3 second. An alternate device meeting the above requirements must be available in the event adequate incineration in the primary device cannot be accomplished. Venting of TRS gases during changeover must be minimized but in no case may the time exceed one (1) hour.

(E) Other Sources:

- (i) The total emissions of TRS from other sources may not exceed 0.078 kg/metric ton (0.156 pound/ton) of production as a daily arithmetic average.
- (ii) Miscellaneous Sources and Practices. If LRAPA determines that sewers, drains, and anaerobic lagoons significantly contribute to an odor problem, a program for control will be required.

- (b) Particulate Matter:
- (A) Recovery Furnaces. The emissions of particulate matter from each recovery furnace stack may not exceed:
    - (i) 2.0 kilograms per metric ton (4.0 pounds per ton) of production as a daily arithmetic average;
    - (ii) 0.30 gram per dry standard cubic meter (0.13 grain per dry standard cubic foot) as a daily arithmetic average; and
    - (iii) 35 percent opacity for a period or periods aggregating more than 30 minutes in any 180 consecutive minutes or more than 60 minutes in any 24 consecutive hours (excluding periods when the facility is not operating).
  - (B) Lime Kilns. The emissions of particulate matter from each lime kiln stack may not exceed:
    - (i) 0.50 kilogram per metric ton (1.00 pound per ton) of production as a daily arithmetic average;
    - (ii) 0.46 gram per dry standard cubic meter (0.20 grain per dry standard cubic foot) as a daily arithmetic average; and
    - (iii) The visible emission limitations in paragraph 33-070(3)(d).
  - (C) Smelt Dissolving Tanks. The emission of particulate matter from each smelt dissolving tank stack may not exceed:
    - (i) 0.25 kilogram per metric ton (0.50 pound per ton) of production as a daily arithmetic average; and
    - (ii) The visible emission limitations in paragraph 33-070(3)(d).
  - (D) Replacement of or modification or a rebuild of an existing particulate pollution control device for which a capital expenditure of 50 percent or more of the replacement cost of the existing device is required, other than ongoing routine maintenance, after July 1, 1988, will result in more restrictive standards as follows:
    - (i) Recovery Furnaces.
      - (I) The emission of particulate matter from each affected recovery furnace stack may not exceed 1.00 kilogram per metric ton (2.00 pounds per ton) of production as a daily arithmetic average; and

- (II) 0.10 gram per dry standard cubic meter (0.044 grain per dry standard cubic foot) as a daily arithmetic average.
- (ii) Lime Kilns.
  - (I) The emission of particulate matter from each affected lime kiln stack may not exceed 0.25 kilogram per metric ton (0.50 pound per ton) of production as a daily arithmetic average; and
  - (II) 0.15 gram per dry standard cubic meter (0.067 grain per day standard cubic foot) as a daily arithmetic average when burning gaseous fossil fuel; or
  - (III) 0.50 kilogram per metric ton (1.00 pound per ton) of production as a daily arithmetic average; and
  - (IV) 0.30 gram per dry standard cubic meter (0.13 grain per dry standard cubic foot) as a daily arithmetic average when burning liquid fossil fuel.
- (iii) Smelt Dissolving Tanks. The emissions of particulate matter from each smelt dissolving tank vent stack may not exceed 0.15 kilogram per metric ton (0.30 pound per ton) of production as a daily arithmetic average.
- (c) Sulfur Dioxide (SO<sub>2</sub>). Emissions of sulfur dioxide from each recovery furnace stack may not exceed a 3-hour arithmetic average of 300 ppm on a dry-gas basis except when burning fuel oil. The sulfur content of fuel oil used may not exceed the sulfur content of residual and distillate oil established in subsections 32-065(1) and (2), respectively.
- (d) Emissions from each kraft mill source, with the exception of the mill's emissions attributable to a recovery furnace, may not equal or exceed 20 percent opacity as a six (6) minute average of the operating time.
- (e) Emissions from each kraft mill source with specific particulate emission limits included in this rule are exempt from the grain loading emission limits and the opacity limits in title 32.
- (f) New Source Performance Standards. New or modified sources that commenced construction after September 24, 1976, are subject to each provision of this section and the New Source Performance Standards, 40 CFR part 60, subpart BB as adopted under section 46-630, In addition, when these sections are more stringent than 40 CFR part 60 subpart BB, LRAPA may require some or all of the relevant monitoring in this subsection.
- (4) More Restrictive Emission Limits

LRAPA may establish more restrictive emission limits than the numerical emission standards contained in subsection 33-070(3) and maximum allowable daily mill site emission limits in kilograms per day for an individual mill upon a finding by LRAPA that:

- (a) The individual mill is located or is proposed to be located in a special problem area or an area where ambient air standards are exceeded or are projected to be exceeded or where the emissions will have a significant impact in an area where the standards are exceeded; or
  - (b) An odor or nuisance problem has been documented at any mill, in which case the TRS emission limits may be reduced below the regulatory limits; or LRAPA may require the mill to undertake an odor emission reduction study program; or
  - (c) Other rules which are more stringent apply.
- (5) Monitoring
- (a) (Reserved)
  - (b) Total Reduced Sulfur (TRS). Each mill must monitor TRS continuously using the following:
    - (A) The monitoring equipment must determine compliance with the emission limits and reporting requirements established by these regulations, and must continuously sample and record concentrations of TRS;
    - (B) The sources monitored must include, but are not limited to, individual recovery furnaces and lime kilns. All sources must be monitored downstream of their respective control devices, in either the ductwork or the stack, in accordance with the DEQ Continuous Monitoring Manual;
    - (C) Unless otherwise authorized or required by permit, at least once per year, vents from other sources as required in subparagraph 33-070(3)(a)(E), other sources, must be sampled to demonstrate the representativeness of the emissions of TRS using EPA Method 16, 16A, 16B or continuous emissions monitors. Sampling using these EPA methods must consist of three (3) separate consecutive runs of one (1) hour each, using the DEQ Source Sampling Manual. Continuous emissions monitors must be operated for three (3) consecutive hours in accordance with the DEQ Continuous Monitoring Manual. All results must be reported to LRAPA;
    - (D) Smelt dissolving tank vents must be sampled for TRS quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 0.0124 gram/kg BLS (0.025 pound/ton BLS) using EPA Method 16, 16A, 16B or continuous emission monitors. Sampling using these EPA methods must consist of three (3) separate consecutive runs of one (1) hour each using the DEQ Source Sampling Manual.

- (c) Particulate Matter.
- (A) Each mill must sample the recovery furnace, lime kiln and smelt dissolving tank vent for particulate emissions as measured by EPA Method 5 or 17, using the DEQ Source Sampling Manual. Particulate matter emission determinations by EPA Method 5 must use water as the cleanup solvent instead of acetone and consist of the average of three (3) separate consecutive runs having a minimum sampling time of 60 minutes each, a maximum sampling time of eight (8) hours each, and a minimum sampling volume of 31.8 dscf each.
- (i) When applied to recovery furnace gases "dry standard cubic meter" requires adjustment of the gas volume to that which would result in a concentration of eight (8) percent oxygen if the oxygen concentration exceeds eight (8) percent.
- (ii) When applied to lime kiln gases "dry standard cubic meter" requires adjustment of the gas volume to that which would result in a concentration of ten (10) percent oxygen if the oxygen concentration exceeds ten (10) percent.
- (iii) The mill must demonstrate that oxygen concentrations are below the values in sub-subparagraphs (i) and (ii) or furnish oxygen levels and corrected data.
- (B) Each mill must provide continuous monitoring of opacity of emissions discharged to the atmosphere from each recovery furnace stack using the DEQ Continuous Monitoring Manual.
- (C) (Reserved)
- (D) Recovery furnace particulate source tests must be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 0.225 gram/dscm (0.097 grain/dscf) for furnaces subject to sub-subparagraph 33-070(3)(b)(A)(i) or 0.075 gram/dscm (0.033 grain/dscf) for furnaces subject to supersub-subparagraph 33-070(3)(b)(D)(i)(I).
- (E) Lime kiln source tests must be performed semi-annually.
- (F) Smelt dissolving tank vent source tests must be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 0.187 kilogram per metric ton (0.375 pound per ton) of production.
- (d) Sulfur Dioxide (SO<sub>2</sub>). Representative sulfur dioxide emissions from each recovery furnace must be determined at least once each month by the average of three (3) one-hour source tests using the DEQ Source Sampling Manual or from

continuous emission monitors. If continuous emission monitors are used, the monitors must be operated for three (3) consecutive hours using the DEQ Continuous Monitoring Manual.

- (e) Combined Monitoring. LRAPA may allow the monitoring for opacity of a combination of more than one emission stream if each individual emission stream has been demonstrated (with the exception of opacity) to be in compliance with all the emission limits of subsection 33-070(3). LRAPA may establish more stringent emission limits for the combined emission stream.
- (f) New Source Performance Standards Monitoring. New or modified sources that are subject to the New Source Performance Standards, 40 CFR part 60, subpart BB, must conduct monitoring or source testing as required by subpart BB. In addition, when these rules are more stringent than 40 CFR part 60, subpart BB, LRAPA may require some or all of the relevant monitoring in this subsection.

(6) Reporting

If required by LRAPA or required by permit, each mill must report data each calendar month by the last day of the subsequent month as follows:

- (a) Applicable daily average emissions of TRS gases expressed in parts per million of H<sub>2</sub>S on a dry gas basis with oxygen concentrations, if oxygen corrections are required, for each source included in the approved monitoring program.
- (b) Daily average emissions of TRS gases in pounds of total reduced sulfur per equivalent ton of pulp processed, expressed as H<sub>2</sub>S for each source included in the approved monitoring program.
- (c) Maximum daily 3-hour average emissions of SO<sub>2</sub> based on all samples collected from the recovery furnace, expressed as ppm, dry basis.
- (d) All daily average opacities for each recovery furnace stack where transmissometers are utilized.
- (e) All 6-minute average opacities from each recovery furnace stack that exceed 35 percent.
- (f) Daily average kilograms of particulate per equivalent metric ton (pounds of particulate per equivalent ton) of pulp produced for each recovery furnace stack.
- (g) Unless otherwise approved in writing, all periods of non-condensable gas bypass must be reported.
- (h) Each Kraft mill must furnish, upon request of LRAPA, such other pertinent data as LRAPA may require to evaluate the mill's emission control program.
- (i) Monitoring data reported must reflect actual observed levels corrected for oxygen,

if required, and analyzer calibration.

- (j) Oxygen concentrations used to correct regulated pollutant data must reflect oxygen concentrations at the point of measurement of regulated pollutants.

(7) Chronic Upset Conditions

If LRAPA determines that an upset condition is chronic and correctable by installing new or modified process or control procedures or equipment, the owner or operator must submit to LRAPA a program and schedule to effectively eliminate the deficiencies causing the upset conditions. Such reoccurring upset conditions causing emissions in excess of applicable limits may be subject to civil penalty or other appropriate action.

**Section 33-075 Hot Mix Asphalt Plants**

(1) Definitions

- (a) "Dusts" means minute solid particles released into the air by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, or sweeping.
- (b) "Hot mix asphalt plants" means those facilities and equipment which convey or batch load proportioned quantities of cold aggregate to a drier, and heat, dry, screen, classify, measure, and mix the aggregate with asphalt for purposes of paving, construction, industrial, residential, or commercial use.
- (c) "Portable hot mix asphalt plants" means those hot mix asphalt plants which are designed to be dismantled and are transported from one job site to another job site.
- (d) "Process weight" means the total weight of all materials introduced into any specific process which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. The "process weight per hour" will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle.
- (e) "Special control areas" means any area designated in OAR 340-204-0070, title 29, and:
  - (A) Any incorporated city or within six (6) miles of the city limits of said incorporated city;
  - (B) Any area of Lane County within one (1) mile of any structure or building used for a residence;
  - (C) Any area of Lane County within two (2) miles straight-line distance or air

miles of any paved public road, highway, or freeway having a total of two (2) or more traffic lanes.

(2) Control Facilities Required

- (a) No person may operate any hot mix asphalt plant, either portable or stationary, located within any area of Lane County outside special control areas unless all dusts and gaseous effluents generated by the hot mix asphalt plant are controlled by a control device or devices with a removal efficiency for particulate matter of at least 80 percent by weight. To determine compliance with this standard, the owner or operator must conduct a particulate matter source test using DEQ Method 5 at the inlet and outlet of the control device. If it is not feasible to conduct a particulate matter source test at the inlet to the control device, the owner or operator must provide documentation demonstrating that the control device is designed to meet the standard and prepare and implement an operation and maintenance plan for ensuring that the control device will have at least an 80 percent removal efficiency when operated.
- (b) No person may operate any hot mix asphalt plant, either portable or stationary, located within any special control area of Lane County without installing and operating systems or processes for the control of particulate emissions so as to comply with the emission limits established by the process weight table in section 33-500, attached herewith and by reference made part of this rule. Compliance is determined using DEQ Method 5. All source tests must be done using the DEQ Source Sampling Manual.
- (c) Hot mix asphalt plants are subject to the emission limitations in sections 32-010, 32-015, and 46-535, as applicable.
- (d) If requested by LRAPA, the owner or operator must develop a fugitive emission control plan.

(3) Other Established Air Quality Limitations

The emission limits established under section 33-075 are in addition to visible emission and other ambient air standards, established or to be established by the Board, unless otherwise provided by rule.

(4) Ancillary Sources of Emission--Housekeeping of Plant Facilities

- (a) Ancillary air contamination sources from a hot mix asphalt plant and its facilities which emit air contaminants into the atmosphere such as, but not limited to, the drier openings, screening and classifying system, hot rock elevator, bins, hoppers, and pug mill mixer, must be controlled at all times so as to maintain the highest possible level of air quality and the lowest possible discharge of air contaminants.
- (b) The handling of aggregate and truck traffic must be conducted at all times so as to minimize emissions into the atmosphere.

### **Section 33-080 Reduction of Animal Matter**

- (1) Applicability. Section 33-080 applies in all areas of Lane County which are within city limits or within two (2) miles of the boundaries of incorporated cities.
- (2) Control Facilities Required
  - (a) A person may not operate or use any article, machine, equipment or other contrivance for the reduction of animal matter unless all gases, vapors and gas-entrained effluents from such article, machine, equipment or other contrivance are:
    - (A) Incinerated at temperatures of not less than 1200° F for a period of not less than 0.3 seconds; or
    - (B) Processed in such a manner determined by LRAPA to be equally, or more, effective for the purpose of air pollution control than subparagraph (A).
  - (b) Any person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this section must provide, properly install and maintain in calibration, in good working order and in operation, devices as specified by LRAPA, for indicating temperature, pressure or other operating conditions.
  - (c) For the purpose of this section, "reduction" is defined as any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrating.
  - (d) The provisions of this section do not apply to any article, machine, equipment, or other contrivance used exclusively for the processing of food for human consumption.
- (3) Monitoring of Reduction Facilities
  - (a) When requested by LRAPA for the purpose of formulating plans in conjunction with industries who are or may be sources of air pollution, and to investigate sources of air pollution, monitoring data must be submitted for plant operational periods and must include:
    - (A) Continuous or at least hourly influent and effluent temperature readings on the condenser;
    - (B) Continuous or at least hourly temperature readings on the after-burner;
    - (C) Estimated weights of finished products processed in pounds per hour;
    - (D) Hours of operation per day; and
    - (E) A narrative description to accurately portray control practices, including the

housekeeping measures employed.

- (b) Except as otherwise required under the Oregon Public Records Law, ORS 192.311 to 192.478, when requested by the plant manager any information relating to processing or production must be kept confidential by LRAPA and may not be disclosed or made available to competitors or their representatives in the rendering industry.
  - (c) Whenever a breakdown of operating facilities occurs or unusual loads or conditions are encountered that cause or may cause release of excessive and malodorous gases or vapors, LRAPA must be immediately notified.
- (4) Housekeeping of Plant and Plant Area. The plant facilities and premises are to be kept clean and free of accumulated raw material, products, and waste materials. The methods used for housekeeping must include, but not be limited to:
- (a) A washdown at least once each working day, of equipment, facilities and building interiors that come in contact with raw or partially processed material, with steam or hot water and detergent or equivalent additive;
  - (b) Storage of all solid wastes in covered containers, and daily disposal in an incinerator or fill, approved by LRAPA, or by contract with a company or municipal department providing such service; and
  - (c) Disposal of liquid and liquid-borne waste in a manner approved by LRAPA.

**Section 33-500 Particulate Matter Emissions Standards for Process Equipment**

Particulate Matter Emissions Standards for Process Equipment					
Process lbs/hr	Emissions lbs/hr	Process lbs/hr	Emissions lbs/hr	Process lbs/hr	Emissions lbs/hr
50	0.24	2300	4.44	7500	8.39
100	0.46	2400	4.55	8000	8.71
150	0.66	2500	4.64	8500	9.03
200	0.85	2600	4.74	9000	9.36
250	1.03	2700	4.84	9500	9.67
300	1.20	2800	4.92	10000	10.00
350	1.35	2900	5.02	11000	10.63
400	1.50	3000	5.10	12000	11.28
450	1.63	3100	5.18	13000	11.89

Particulate Matter Emissions Standards for Process Equipment						
Process lbs/hr	Emissions lbs/hr	Process lbs/hr	Emissions lbs/hr	Process lbs/hr	Emissions lbs/hr	
500	1.77	3200	5.27	14000	12.50	
550	1.89	3300	5.36	15000	13.13	
600	2.01	3400	5.44	16000	13.74	
650	2.12	3500	5.52	17000	14.36	
700	2.24	3600	5.61	18000	14.97	
750	2.34	3700	5.69	19000	15.58	
800	2.43	3800	5.77	20000	16.19	
850	2.53	3900	5.85	30000	22.22	
900	2.62	4000	5.93	40000	28.30	
950	2.72	4100	6.01	50000	34.30	
1000	2.80	4200	6.08	60000	40.00	
1100	2.97	4300	6.15	70000	41.30	
1200	3.12	4400	6.22	80000	42.50	
1300	3.26	4500	6.30	90000	43.60	
1400	3.40	4600	6.37	100000	44.60	
1500	3.54	4700	6.45	120000	46.30	
1600	3.66	4800	6.52	140000	47.80	
1700	3.79	4900	6.60	160000	49.00	
1800	3.91	5000	6.67	200000	51.20	
1900	4.03	5500	7.03	1000000	69.00	
2000	4.14	6000	7.37	2000000	77.60	
2100	4.24	6500	7.71	6000000	92.70	
2200	4.34	7000	8.05			

Interpolation and extrapolation of emissions above a process weight of 6,000,000 pounds/ hour is accomplished by the use of this equation:

$$E = (55.0 \times P^{0.11}) - 40,$$

where: P = process weight in tons/ hour, and

E = emission rate in pounds/hour.