- WAC 173-405-040 Emission standards. In addition to the general applicability of chapters 173-400 and 173-490 WAC to all emission sources; no kraft pulp mill shall cause or permit air contaminant emissions in excess of the limits listed below. Specific emission standards listed in this chapter will take precedence over the general emission standards of chapter 173-400 WAC.
 - (1) Recovery furnaces.
- (a) The particulate emissions from each recovery furnace stack shall not exceed 0.23 grams of particulate per dry cubic meter at standard conditions (0.10 grains/dscf) corrected to eight percent oxygen averaged over three one hour tests.
- (b) The TRS emissions from each recovery furnace stack constructed before January 1, 1970, and for recovery furnaces that have direct contact evaporators, shall not exceed 17.5 ppm corrected to eight percent oxygen for a daily average.
- (c) The TRS emissions from each recovery furnace constructed after January 1, 1970, which does not have a contact evaporator, shall not exceed 5.0 ppm corrected to eight percent oxygen for a daily average.
- (2) Smelt dissolver tank vent. The particulate emissions from smelt dissolver tank vents shall not exceed $0.15~\rm grams$ per kilogram (0.30 pounds per ton) of solids fired at the associated recovery furnace.
 - (3) Lime kilns.
- (a) The particulate emission from each lime kiln stack shall not exceed 0.30 grams of particulate per dry cubic meter (0.13 grains/dscf) at standard conditions corrected to ten percent oxygen.
- (b) The TRS emissions from any lime kiln stack shall not exceed eighty ppm expressed as hydrogen sulfide for more than two consecutive hours in any one day.
- (c) The average daily emission of TRS from any lime kiln stack shall not exceed fifty ppm. After January 1, 1985, TRS emissions from each lime kiln stack shall not exceed twenty ppm corrected to ten percent oxygen for a daily average.
 - (4) Other TRS emissions units.
- (a) Noncondensibles from digesters, multiple-effect evaporators and condensate stripper system shall be treated to reduce the emissions of TRS equal to the reduction achieved by thermal oxidation in a lime kiln.
- (b) A backup treatment system or equivalent approved by ecology must be installed to assure continual treatment of noncondensibles.
- (5) Other particulate emissions units. The emission of particulates from emissions units other than kraft recovery furnaces, lime kilns, or smelt dissolving tank vents, shall not exceed the following maximums:
- (a) 0.46 grams per dry cubic meter at standard conditions (0.2 grains/dscf) corrected to seven percent oxygen, for units which combust wood and wood residue to produce steam and which commenced construction prior to January 1, 1983.
- (b) 0.12 grams per dry cubic meter at standard conditions (0.05 grains/dscf) corrected to seven percent oxygen, for units which combust fuel other than wood and wood residue to produce steam, and which commenced construction after January 1, 1983.
- (c) 0.23 grams per dry cubic meter at standard conditions (0.1 grains/dscf) corrected to seven percent oxygen in the case of combustion units, for units not classified under (a) or (b) of this subsection.

- (6) Opacity.
- (a) No person shall cause or allow the emission of a plume from any kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than thirty-five percent for more than six consecutive minutes in any sixty minute period, except as described in WAC 173-405-040 (7).
- (b) No person shall cause or allow the emission of a plume, from any emissions unit other than a kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than twenty percent for more than six consecutive minutes in any sixty minute period. The emissions unit shall comply with the alternative visible emission standard for:
 - (i) Soot blowing or grate cleaning in WAC 173-400-040 (2)(a);
- (ii) Hog fuel or wood fired boiler in operation before January 24, 2018, in WAC 173-400-040 (2)(e); and/or
 - (iii) Furnace refractory in WAC 173-400-040 (2)(f).
- (c) There shall be no more than one violation notice issued in any sixty minute period.
- (d) These provisions (of WAC 173-405-040(6)) shall not apply when the presence of uncombined water is the only reason for the opacity of the plume to exceed the applicable maximum.
- (7) Alternative emission limitation. An owner or operator may request an alternative emission limit (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.
- (8) Operation and maintenance. At all times, including periods of abnormal operation and upset conditions, owners and operators shall, to the extent practicable, maintain and operate any 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.
 - $(9) SO_2.$
- (a) The emission of sulfur dioxide from any recovery furnace or lime kiln shall not exceed five hundred ppm for an hourly average, corrected to eight percent oxygen for a recovery furnace or to ten percent oxygen for a lime kiln.
- (b) The emission of sulfur dioxide from any emissions unit other than a recovery furnace or lime kiln shall not exceed one thousand ppm for an hourly average, corrected to seven percent oxygen for combustion units.
- (10) Source testing. To demonstrate compliance with this chapter, the provisions of WAC 173-400-105 shall apply to all sources to which this chapter is applicable.

[Statutory Authority: Chapter 70.94 RCW and RCW 70.94.395. WSR 19-10-028 (Order 18-03), § 173-405-040, filed 4/23/19, effective 5/24/19. Statutory Authority: Chapter 70.94 RCW. WSR 91-05-064 (Order 90-06), § 173-405-040, filed 2/19/91, effective 3/22/91. Statutory Authority: Chapters 43.21A and 70.94 RCW. WSR 83-09-036 (Order DE 83-13), § 173-405-040, filed 4/15/83. Statutory Authority: RCW

70.94.331 and 70.94.395. WSR 80-11-060 (Order DE 80-15), § 173-405-040, filed 8/20/80.]