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Title 22@ Social Security

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Division 4.5@ Environmental Health Standards for the Management of Hazardous Waste

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Chapter 16@ Recyclable Materials (Recyclable Hazardous Wastes)

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Article 8@ Hazardous Waste Burned in Boilers and Industrial Furnaces

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Section 66266.109@ Low Risk Waste Exemption

## **66266.109 Low Risk Waste Exemption**

### **(a)**

Waiver of DRE standard. The DRE standard of section 66266.104(a) does not apply if the boiler or industrial furnace is operated in conformance with (a)(1) of this section and the owner or operator demonstrates by procedures prescribed in (a)(2) of this section that the burning will not result in unacceptable adverse health effects. (1) The device shall be operated as follows: (A) A minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the Director on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired; (B) Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb; (C) The hazardous waste is fired directly into the primary fuel flame zone of the combustion chamber; and (D) The device operates in conformance with the carbon monoxide controls provided by section 66266.104(b)(1). Devices subject to the exemption provided by this section are not eligible for the alternative carbon monoxide controls provided by section 66266.104(c). (2) Procedures to demonstrate that the hazardous waste burning will not pose unacceptable

adverse public health effects are as follows: (A) Identify and quantify those nonmetal compounds listed in appendix VIII of chapter 11 of this division that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis shall be identified and the basis for their exclusion explained; (B) Calculate reasonable, worst-case emission rates for each constituent identified in subsection (a)(2)(A) of this section by assuming the device achieves 99.9 percent destruction and removal efficiency. That is, assume that 0.1 percent of the mass weight of each constituent fed to the device is emitted. (C) For each constituent identified in subsection (a)(2)(A) of this section, use emissions dispersion modeling to predict the maximum annual average ground level concentration of the constituent. 1. Dispersion modeling shall be conducted using methods specified in section 66266.106(h). 2. Owners and operators of facilities with more than one on-site stack from a boiler or industrial furnace that is exempt under this section shall conduct dispersion modeling of emissions from all stacks exempt under this section to predict ambient levels prescribed by this subsection. (D) Ground level concentrations of constituents predicted under subsection (a)(2)(C) of this section shall not exceed the following levels: 1. For the noncarcinogenic compounds listed in appendix IV of this chapter, the levels established in appendix IV; 2. For the carcinogenic compounds listed in appendix V of this chapter, the sum for all constituents of the ratios of the actual ground level concentration to the level established in appendix V cannot exceed 1.0; and 3. For constituents not listed in appendix IV or V, 0.1 micrograms per cubic meter.

**(1)**

The device shall be operated as follows: (A) A minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by

the Director on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

(B) Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb; (C) The hazardous waste is fired directly into the primary fuel flame zone of the combustion chamber; and (D) The device operates in conformance with the carbon monoxide controls provided by section 66266.104(b)(1). Devices subject to the exemption provided by this section are not eligible for the alternative carbon monoxide controls provided by section 66266.104(c).

**(A)**

A minimum of 50 percent of fuel fired to the device shall be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the Director on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate shall be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

**(B)**

Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb;

**(C)**

The hazardous waste is fired directly into the primary fuel flame zone of the combustion chamber; and

**(D)**

The device operates in conformance with the carbon monoxide controls provided by section

66266.104(b)(1). Devices subject to the exemption provided by this section are not eligible for the alternative carbon monoxide controls provided by section 66266.104(c).

**(2)**

Procedures to demonstrate that the hazardous waste burning will not pose unacceptable adverse public health effects are as follows: (A) Identify and quantify those nonmetal compounds listed in appendix VIII of chapter 11 of this division that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis shall be identified and the basis for their exclusion explained; (B) Calculate reasonable, worst-case emission rates for each constituent identified in subsection (a)(2)(A) of this section by assuming the device achieves 99.9 percent destruction and removal efficiency. That is, assume that 0.1 percent of the mass weight of each constituent fed to the device is emitted. (C) For each constituent identified in subsection (a)(2)(A) of this section, use emissions dispersion modeling to predict the maximum annual average ground level concentration of the constituent. 1. Dispersion modeling shall be conducted using methods specified in section 66266.106(h). 2. Owners and operators of facilities with more than one on-site stack from a boiler or industrial furnace that is exempt under this section shall conduct dispersion modeling of emissions from all stacks exempt under this section to predict ambient levels prescribed by this subsection. (D) Ground level concentrations of constituents predicted under subsection (a)(2)(C) of this section shall not exceed the following levels: 1. For the noncarcinogenic compounds listed in appendix IV of this chapter, the levels established in appendix IV; 2. For the carcinogenic compounds listed in appendix V of this chapter, the sum for all constituents of the ratios of the actual ground level concentration to the level established in appendix V cannot exceed 1.0; and 3. For constituents not listed in appendix IV or V, 0.1 micrograms per cubic meter.

**(A)**

Identify and quantify those nonmetal compounds listed in appendix VIII of chapter 11 of this division that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis shall be identified and the basis for their exclusion explained;

**(B)**

Calculate reasonable, worst-case emission rates for each constituent identified in subsection (a)(2)(A) of this section by assuming the device achieves 99.9 percent destruction and removal efficiency. That is, assume that 0.1 percent of the mass weight of each constituent fed to the device is emitted.

**(C)**

For each constituent identified in subsection (a)(2)(A) of this section, use emissions dispersion modeling to predict the maximum annual average ground level concentration of the constituent. 1. Dispersion modeling shall be conducted using methods specified in section 66266.106(h). 2. Owners and operators of facilities with more than one on-site stack from a boiler or industrial furnace that is exempt under this section shall conduct dispersion modeling of emissions from all stacks exempt under this section to predict ambient levels prescribed by this subsection.

**1.**

Dispersion modeling shall be conducted using methods specified in section 66266.106(h).

**2.**

Owners and operators of facilities with more than one on-site stack from a boiler or industrial furnace that is exempt under this section shall conduct dispersion modeling of emissions from all stacks exempt under this section to predict ambient levels prescribed by this subsection.

**(D)**

Ground level concentrations of constituents predicted under subsection (a)(2)(C) of this

section shall not exceed the following levels: 1. For the noncarcinogenic compounds listed in appendix IV of this chapter, the levels established in appendix IV; 2. For the carcinogenic compounds listed in appendix V of this chapter, the sum for all constituents of the ratios of the actual ground level concentration to the level established in appendix V cannot exceed 1.0; and 3. For constituents not listed in appendix IV or V, 0.1 micrograms per cubic meter.

**1.**

For the noncarcinogenic compounds listed in appendix IV of this chapter, the levels established in appendix IV;

**2.**

For the carcinogenic compounds listed in appendix V of this chapter, the sum for all constituents of the ratios of the actual ground level concentration to the level established in appendix V cannot exceed 1.0; and

**3.**

For constituents not listed in appendix IV or V, 0.1 micrograms per cubic meter.

**(b)**

Waiver of particulate matter standard. The particulate matter standard of section 66266.105 does not apply if: (1) The DRE standard is waived under subsection (a) of this section; and (2) The owner or operator complies with the Tier I or adjusted Tier I metals feed rate screening limits provided by section 66266.106(b) or (e).

**(1)**

The DRE standard is waived under subsection (a) of this section; and

**(2)**

The owner or operator complies with the Tier I or adjusted Tier I metals feed rate screening limits provided by section 66266.106(b) or (e).