CA

66266.110 Waiver of DRE Trial Burn for Boilers

Boilers that operate under the special requirements of this section, and that do not burn hazardous waste containing, (or derived from) US EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027, are considered to be in conformance with the DRE standard of section 66266.104 , and a trial burn to demonstrate DRE is waived. When burning hazardous waste:

(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)

Boiler load shall not be less than 40 percent. Boiler load is the ratio at any time of the total heat input to the maximum design heat input;

(c)

Primary fuels and hazardous waste fuels shall have a minimum as-fired heating value of 8,000 Btu/lb, and each material fired in a burner where hazardous waste is fired shall have a heating value of at least 8,000 Btu/lb, as-fired;

(d)

The device shall operate in conformance with the carbon monoxide standard provided by section 66266.104(b)(1). Boilers subject to the waiver of the DRE trial burn provided by this section are not eligible for the alternative carbon monoxide standard provided by section 66266.104(c);

(e)

The boiler shall be a watertube type boiler that does not feed fuel using a stoker or stoker type mechanism; and

(f)

The hazardous waste shall be fired directly into the primary fuel flame zone of the combustion chamber with an air or steam atomization firing system, mechanical atomization system, or a rotary cup atomization system under the following conditions: (1) Viscosity. The viscosity of the hazardous waste fuel as-fired shall not exceed 300 SSU; (2) Particle size. When a high pressure air or steam atomizer, low pressure atomizer, or mechanical atomizer is used, 70% of the hazardous waste fuel shall pass through a 200 mesh (74 micron) screen, and when a rotary cup atomizer is used, 70% of the hazardous waste shall pass through a 100 mesh (150 micron) screen; (3) Mechanical atomization systems. Fuel pressure within a mechanical atomization system and fuel flow rate shall be maintained within the design range taking into account the viscosity and volatility of the fuel; (4) Rotary cup atomization systems. Fuel flow rate through a rotary cup atomization system shall be maintained within the design range taking into account the viscosity and volatility of the fuel.

(1)

Viscosity. The viscosity of the hazardous waste fuel as-fired shall not exceed 300 SSU;

(2)

Particle size. When a high pressure air or steam atomizer, low pressure atomizer, or mechanical atomizer is used, 70% of the hazardous waste fuel shall pass through a 200 mesh (74 micron) screen, and when a rotary cup atomizer is used, 70% of the hazardous waste shall pass through a 100 mesh (150 micron) screen;

(3)

Mechanical atomization systems. Fuel pressure within a mechanical atomization system and fuel flow rate shall be maintained within the design range taking into account the viscosity and volatility of the fuel;

(4)

Rotary cup atomization systems. Fuel flow rate through a rotary cup atomization system shall be maintained within the design range taking into account the viscosity and volatility of the fuel.