

3745-266-110 Waiver of destruction and removal efficiency trial burn for boilers.

Boilers that operate under the special requirements of this rule, and that do not burn hazardous waste containing (or derived from) EPA hazardous waste numbers F020, F021, F022, F023, F026, or F027, are considered to be in conformance with the destruction and removal efficiency (DRE) standard of paragraph (A) of rule 3745-266-104 of the Administrative Code, and a trial burn to demonstrate DRE is waived. When burning hazardous waste:

- (A) A minimum of fifty per cent of fuel fired to the device must 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 rule. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The fifty per cent primary fuel firing rate must 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 must not be less than forty per cent. 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 must have a minimum as-fired heating value of eight thousand Btu per pound, and each material fired in a burner where hazardous waste is fired must have a heating value of at least eight thousand Btu per pound, as-fired;
- (D) The device must operate in conformance with the carbon monoxide standard provided by paragraph (B)(1) of rule 3745-266-104 of the Administrative Code. Boilers subject to the waiver of the DRE trial burn provided by this rule are not eligible for the alternative carbon monoxide standard provided by paragraph (C) of rule 3745-266-104 of the Administrative Code;
- (E) The boiler must be a watertube type boiler that does not feed fuel using a stoker or stoker type mechanism; and
- (F) The hazardous waste must 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 must not exceed three hundred SSU;
 - (2) Particle size. When a high pressure air or steam atomizer, low pressure atomizer, or mechanical atomizer is used, seventy per cent of the hazardous waste fuel must pass through a two hundred mesh (seventy-four micron) screen, and when a rotary cup atomizer is used, seventy per cent of the hazardous waste must pass through a one hundred mesh (one hundred fifty micron) screen;

- (3) Mechanical atomization systems. Fuel pressure within a mechanical atomization system and fuel flow rate must 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 must be maintained within the design range taking into account the viscosity and volatility of the fuel.

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