**Section 726.210 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) USEPA hazardous waste numbers F020, F021, F022, F023, F026, or F027, are considered to be in conformance with the DRE standard of Section 726.204(a), and a trial burn to demonstrate DRE is waived. When burning hazardous waste:

a) A minimum of 50 percent of fuel fired to the devices must be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the Agency 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 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 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 must have a minimum as-fired heating value of 8,000 Btu/lb, and each material fired in a burner where hazardous waste is fired must have a heating value of at least 8,000 Btu/lb, as fired;

d) The device must operate in conformance with the CO standard provided by Section 726.204(b)(1). Boilers subject to the waiver of the DRE trial burn provided by this Section are not eligible for the alternative CO standard provided by Section 726.204(c);

e) The boiler must be a water tube 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 300 SSU;

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

(Source: Amended at 27 Ill. Reg. 12916, effective July 17, 2003)