



Technical Service Bulletin Date:
Product: X Furnace X Boiler □ Parts and Accessories
Models: X 140 Furnace X 200 Furnace X 350 Furnace
X 200 Boiler X 375 Boiler X 500 Boiler

Burning of Transformer Oil in EnergyLogic Machines

We have occasionally been asked about burning transformer oil with EnergyLogic waste oil heaters and boilers.

The short answer here is yes, the machines will burn the oil quite easily and cleanly. Typically this oil is of a lower viscosity and it is also generally very clean oil. Transformer oil is usually a highly-refined mineral oil that is stable at normal operating temperatures. ASTM standard D3487 "Standard Specification for Mineral Insulating Oil used in Electrical Apparatus" provides additional information about the mineral oil used in distribution transformers. The flashpoint of mineral oil is typically > 290 degrees Fahrenheit and this makes the oil an ideal candidate for burning in EnergyLogic waste oil heaters and boilers.

The concern comes from potential contaminants and from PCB (polychlorinated biphenyls) concentration.

The Resource Conservation and Recovery Act (RCRA) and the Toxic Substances Control Act (TSCA) are the governing law here according to the EPA. The EPA has issued a letter outlining the permissible threshold of PCB concentration of waste oil used for energy recapture.

According to the EPA letter –

“The presence of PCB’s in used oil is not one of the criteria under the RCRA used oil specification standard. However, used oil that contains PCBs is subject to requirements under the Toxic Substances Control Act (TSCA). In that respect, TSCA requirements for the marketing and burning for energy recovery of used oil that contains detectable quantities of PCBs less than 50 parts per million (50 ppm) incorporate certain RCRA Part 279 “off-specification” oil requirements *by reference*”

So – translating the government speak here a little bit – our interpretation of this is that oil containing 50 ppm (or less) PCBs is fine to dispose of in EnergyLogic waste oil heaters and boilers.

We have the EPA letter on file and will be happy to provide it to you if you’d like some bedtime reading material.