GENERAL INFORMATION ON FEDERAL & STATE APPROVALS

The manufacture and sale of waste oil burning equipment is covered by both federal and state regulations. These are generally separated into environmental and safety issues, respectively. Although there is a certain amount of overlap between federal and state, the states usually administer these regulations through various approval processes. Individual installations are monitored by local inspectors through the process of reviewing applications, permitting, assessing fees and follow-up inspections.

As with any heating device waste oil furnaces are expected to meet certain national codes involving safety, performance, endurance testing, and adherence to installation and electric codes. States, municipalities and insurance companies rely on independent third-party approval agencies to regulate equipment design issues. The following information details the regulations addressed in the first paragraph and discuss the national standards that are imposed on the design, manufacture, installation and use of waste oil burning equipment.

FEDERAL REGULATION (EPA)

The Environmental Protection Agency (EPA) establishes the rules that allow for the burning of used oils for energy recovery and publishes the pertinent regulations in the Federal Register. The section that pertains to the waste oil burning industry is covered in 40 CFR, part 279. After several years of debate and uncertainty regarding *listing or not listing used oils as a hazardous waste*, the EPA handed down their final decision explained in this section in September, 1992. It was a very favorable determination for the manufacturers and users of waste oil burning equipment.

Rather than monitoring the air emissions, the EPA has written the regulations from the premise of what is being burned. If the oil is acceptable, they then believe the emission will be acceptable. They've divided oils into two categories, those that are relatively benign and create little concern when burned are called "**on-specification oils**", and those that contain more than the allowable limits of heavy metals, halogens, or the presence of low volatile fuels are called "**off-specification oils**".

The EPA regulations allow the burning of "on-specification" used oils in equipment designed for energy recovery, generally without limitation. "Off-specification" used oils are also allowed to be burned, but are limited to devices that are 500,000 BTUs or less, the devices are vented to the outside, and they burn only oils generated on-site. People often misinterpret these regulations and apply the above limitations to the "on-specification" oils, so there is some confusion. There are few restrictions if the oil is burned in boilers by small generators, or when burning oils that were originally intended as a fuel (such as jet fuels). There are no permits or licensing requirements on the federal level for the burning of used oils by small generators.

NATIONAL STANDARDS & APPROVAL AGENCIES

States, municipalities and insurance companies require that a third-party agency certify that they have tested the equipment to ensure that the construction standard has been met and is maintained in the assembly and operation of the equipment. The standard for waste oil burning is known as Underwriters Laboratory 296A for Waste Oil-burning Air-heating Appliances. It requires end-user compliance with other national codes, such as:

For furnace equipment:	ANSI/NFPA # 31 – *Standard for the Installation of Oil-Burning* Equipment – 2006 Edition, and in Canada to CSA Standard B139.
For chimney installation:	ANSI/NFPA # 211 – *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel Burning* Appliance, 2006 Edition
For oil storage installation:	NFPA # 31 – Standard for the Installation of Oil-Burning Equipment – 2006 Edition
For electrical installation:	NFPA # 70 – *National Electrical Code* – 2005
For burner "only"	ANSI/UL296 – Standard for Safety Oil Burners, CSA B140.0 – General Requirements for Oil Burning Equipment General Instruction No2-4.

These codes are enforced by local authorities, usually by representatives of Building Inspection Departments or Fire Departments.

STATE APPROVALS

Most states have generally adopted the federal EPA regulations regarding the burning of used oils. We've seen additional, but varying requirements on the storage, handling and transportation of those oils. We have written to each state seeking their approval to sell our product and to obtain their permitting and installation requirements. Some have returned one-half page authorizations, while others have sent sizable documents. Although sometimes challenging to sort through the administrative layers to identify the proper authority and code, we've generally found most administrators to be supportive of the prospects of burning used oils. The Minnesota Office of Waste Management published an extensive study in 1990 for the purpose of determining the best method of disposing of used oils, anticipating that re-refining oils would be economically and ecologically preferred. Based on the results of the study, Minnesota concluded that re-refining was not a viable alternative but recommended the burning of oils for energy recovery.

Each state has their own administrative agency that is responsible for regulating various used oil situations. In Minnesota it is the Pollution Control Agency (MPCA); in Wisconsin it is the Department of Commerce; in Michigan it is the Department of Natural Resources (MDNR).

CITY APPROVALS

Most large cities have departments that monitor the installation of heating systems in commercial buildings through application, permitting and the inspection process. Most cities require that a heating contractor licensed with their city install any heating system. That contractor is responsible for obtaining any relevant permits by submitting applications, building and heating plans, and paying appropriate fees. The general purpose of an application and approval process is for fire protection. The requirements vary from city to city and are best known by the local heating contractor.