



Waste-Oil Heating Tip Sheet

Minnesota law requires that used oil be recycled, and there are numerous options. But businesses with a plentiful supply of waste oil may want to consider purchasing a waste-oil heater or water boiler for their facilities in order to cut their utility bills.

Here are answers to questions about waste-oil heaters and the considerations to make:

Q. What do waste-oil heaters do and who uses them?

A. Several manufacturers now sell furnaces and boilers that run exclusively on used oil or a combination of both used oil and standard fuel oil. Some models can burn several types of waste oil, including motor oil, cooking oil and transmission and hydraulic fluid. Common users of waste-oil heaters include auto-repair shops, manufacturers and businesses with large vehicle fleets.

Q. How much used oil must I generate to make it worth the cost?

A. Manufacturers of waste-oil heaters and other experts say a business typically must have at least 750 gallons of used oil annually to make the equipment worthwhile. But it will depend on the equipment's initial cost and the current heating bills for the facility.

Q. How much do the units cost?

A. Prices vary greatly depending on the type and sophistication of the equipment and can run anywhere from \$2,000 to more than \$7,000. The upfront cost may be higher than natural gas or electric furnaces but have potential to generate big energy savings since you will avoid the cost of purchasing energy from a utility.

Q. What is the energy- and money-saving potential?

A. The energy savings will depend on how much waste oil is available, the efficiency of the unit, the space and/or water heating needs of the facility, among other factors. However, businesses that produce hundreds of gallons of waste oil can eliminate their typical annual heating bills, saving thousands of dollars a year in heating costs. Experts say the units can pay for themselves in roughly two years.

Moreover, companies that pick up oil often charge fees that could be avoided if the oil is reused for space or water heating.



Q. Are waste-oil heaters an environmentally-sound purchase?

A. Waste-oil heaters today generally give off an emission that's on par with what other types of furnaces and boilers give off. They also help businesses most efficiently dispose of their waste oil and put it to good use through heat recovery. Instead of sending it off to a processor – which creates the potential for spills – it allows a business to use the waste oil on site.

Q. Any drawbacks to consider?

A. Waste-oil heaters may have somewhat higher upfront costs than standard natural-gas furnaces and may need to be cleaned and maintained more frequently due to ash created by the burning of the waste oil. They also require a bigger time commitment, since someone must regularly replenish the used oil supply in the heater.

Q. What are some good resources for more information on this?

A. Plenty of information on waste-oil heating can be found through a basic Internet search, but here are some helpful links to check out:

- http://www.hrt.msu.edu/energy/Notebook/pdf/Sec4/Heating_with_Bioheat_and_Waste_Oil_by_Bartok.pdf
- <http://www.greentruck.com/waste/oil/1303.html>

Have other questions about using waste oil for heating or disposal of it? Energy Smart can help! Contact us at (651) 292-4652.