

Waste Oil Disposal and Energy Recovery

PROJECT OVERVIEW

The primary goal of this project is to demonstrate waste oil boiler (WOB) systems as part of an environmentally friendly waste oil disposal process with a secondary goal of providing hot water/heat for a variety of applications. The deployment and setup of a WOB system for waste oil disposal and energy provision will be executed at three military locations, such as Tyndall AFB, Eielson AFB, and a third location that has yet to be defined.

BENEFITS

WOB technology can provide a cost-effective method of waste oil disposal and supply hot water/heat to support a variety of activities including personal hygiene, cooking, laundry, and larger applications such as vehicle wash racks. For example, Eielson AFB, AK generates 7,000 gal of waste oil per year at a current disposal cost of \$5/gallon. The use of a WOB system will result in cost savings of \$35,000 per year in disposal costs, while also adding the benefit of providing heat for the facility in which it is installed.

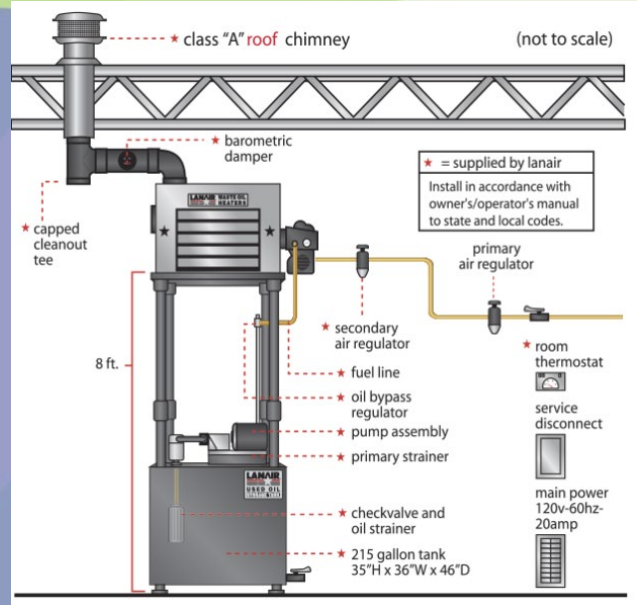
PATH FORWARD

A recent site visit to Eielson AFB, AK has identified two of three possible sites for WOB system deployment. After establishing site-specific requirements for each site at Eielson AFB, two systems will be down-selected and purchased based on these requirements. Shipment, installation, and testing will follow starting approximately April 2025.

The third site is currently Tyndall AFB, FL but this may change if we can identify an additional opportunity at an alternate site with an abundance of waste oil.



Waste Oil Storage Onsite



Example WOB system as manufactured by Lanier

DoD Executive Agent

Office of the Assistant Secretary of the Army for Installations, Energy, and Environment

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FOR FURTHER INFORMATION

National Defense Center for Energy and Environment
<http://www.denix.osd.mil/ndcee/>

Air Force Civil Engineer Center (AFCEC)
<https://www.afcec.af.mil/>