## ECOHEAT - INCREASED EFFICEICENCY/REDUCED EMISSIONS

EcoHeat is an idle reduction device designed to provide in transit heat while mitigating main engine idle. This unit is virtually maintenance free except for a yearly PM.

## How does the unit work?

The unit works on a basic boiler and pump principle. A diesel fired boiler is attached to a 15 gallon per minute circulating pump with a thermostat and will turn heat demand off and an on based on the return coolant temperature.

The following steps are how to operate the EcoHeat system.

- 1 Connect in transit lines and make sure they are always connected to the tanker before use.
- 2 Make sure truck coolant and engine are at normal operating temperature.
- 3 On the dash locate the switch that has a "red" safety cover switch
- This safety cover is designed to prevent accidental activation of the unit, and if bumped fails to the off position.
- 5 Lift the "red" safety cover and flip switch up.
- The system is now activated, and the switch should illuminate to indicate power on function.
- After 2 minutes it is recommend you step out of the cab to make sure the unit has begun function a force air "jet sounding" sound will exit the large 1 inch flexible tail pipe when the boiler is actively producing heat. If the demand cycle does not call for heat you will hear a small hum of the circulating pump. (these are normal operational sounds)
- 8 To shut unit off flip switch on dash start truck and proceed.

## Few statistics

Typical tanker idle for a year is 31% most of this is due to maintain product temperature.

Truck uses 1.2-1.4 gallons per hour to idle.

Under maximum conditions with Apu and the EcoHeat fuel usage is 0.5-0.6 gallons per hour, a reduction of 0.6-0.8 gallons per hour.

This is a nightly savings of \$26.40 if fuel is at \$4.00 per gallon, or a weekly increase in take home of \$184.80. (This is worst case – the EcoHeat and Apu will cycle so usage on fuel will be significantly less per hour increasing the savings)