Improving the Quality of Biodiesel for Heavy Machinery and Agricultural Equipment

Biodiesel is produced from vegetable oils or animal fats and an alcohol. It can be used in diesel engine transportation vehicles, heavy and agricultural equipment, either alone or blended with regular hydrocarbon diesel.

There is viability of biodiesel production through the use of grease trap waste as raw material. This approach requires purification to minimize soap formation and reduced sulfur content to less than 15 ppm approved by ASTM.









Blockages & Backups

The purpose of grease traps is to collect excess grease

We will turn your excess grease trap wastes into renewable fuels:

- To power your diesel engines
- Generate electricity
- · Power farm equipment and more!

Ph.D. Student: Shehu Isah

E-mail: sisah17@students.desu.edu

USDA-ARS Lead Research Scientist: Dr. Victor Wyatt

E-mail: <u>Victor.Wyatt@ars.usda.gov</u> Faculty Advisor: Dr. Gulnihal Ozbay

E-mail: gozbay@desu.edu



