

# USDA To Blend Biodiesel With Heating Oil This Winter

(October 13, 2000; Jefferson City, MO) As winter approaches, one government agency is taking action to help alleviate the projected shortage of home heating oil by using biodiesel to heat some of its buildings.

The Agricultural Research Service (ARS) in Beltsville, MD will use a blend of five percent biodiesel (B5) in its heating oil this winter. ARS is the research agency within the United States Department of Agriculture (USDA).

Biodiesel is a clean-burning fuel made from domestically produced renewable fats and oils—most commonly soybean oil. It has similar fuel economy and performance as conventional petroleum distillate fuels such as kerosene, diesel fuel and heating oil. The use of biodiesel drastically cuts harmful emissions such as carbon monoxide, unburned hydrocarbons and particulate matter compared to petroleum-based diesel, and reduces air toxics by up to 90 percent.

Although biodiesel is used to heat homes in Europe, ARS is taking the lead in using the fuel with heating oil in the U.S.

"If we use a B5 blend, even five percent less fuel, that means there's five percent more fuel oil to go around," said John Van de Vaarst, ARS deputy area director. "Our goal is to demonstrate that it can work as home heating oil, and to raise awareness in the government that it is an option to stretch our heating oil supply this year and in the future."

ARS already uses a blend of 20 percent biodiesel and 80 percent petroleum diesel (B20) in diverse fleet of 150 diesel vehicles.

"We're very pleased with the results of biodiesel in our diesel vehicles," Van de Vaarst said. "We've had no problems with it. Our mechanics like it, the operators like it and we had no reservations about using it in our boilers as a result."

A 1993 study conducted in the U.S. by R.W. Beckett Corp. showed biodiesel and home heating oil were close in performance, with biodiesel burning cleaner and having more thermal stability.

"Biodiesel use in home heating oil applications can play a significant role in developing a strategy for energy conservation and domestic energy security," said Joe Jobe, executive director of the National Biodiesel Board (NBB). NBB is a non-profit trade association for the biodiesel industry. "Biodiesel has excellent potential to play a role as a fuel extender for home heating oil, or as a replacement fuel in industrial heating applications."

Biodiesel is the only alternative fuel to have completed the Health Effects testing requirements of the Clean Air Act amendments of 1990. Those test results show it is non-toxic, biodegradable and free of sulfur. The National Renewable Energy Lab estimates the cancer-causing potential of biodiesel exhaust is 94 percent less than that of petroleum diesel.

Additionally, US Department of Energy lifecycle analysis shows an 80 percent reduction in CO<sub>2</sub>, the primary greenhouse gas attributed to global warming.

The National Biodiesel Board is funded in part by the United Soybean Board and state soybean board check-off programs.