Biodiesel Initiative

Western New York

Western New York Biodiesel Initiative

"Niagara Frontier Transit Metro Systems Inc. participated in a demonstration project, sponsored by NYSERDA, … during the demonstration period, Metro did not experience any differences in operations or performance due to the use of biodiesel. The project was publicized and Metro received no unfavorable comments with regards to the use of biodiesel. Based on the favorable outcome of this project, Metro will continue to consider the use of biodiesel as a viable alternative fuel."

-Walter D. Zmuda, Director, Surface Transportation Niagara Frontier Transportation Authority

Background

Biodiesel is a renewable alternative to conventional diesel. It does not contain petroleum, but it can be blended at any level with petroleum diesel to reduce emissions and improve lubricity. The main feedstocks for biodiesel are agricultural commodities like soybeans and rapeseed (virgin oils), or refined cooking oils and unwanted animal fats (non-virgin oils). Biodiesel can be used as a full replacement of diesel fuel (B-100), but it is most commonly found mixed at a ratio of 20% biodiesel to 80% normal diesel (B-20).

Initiative

The New York State Energy Research and Development Authority (NYSERDA) has committed approximately **$420,000** to biodiesel infrastructure and fuel deployment projects in Western New York. NYSERDA has provided $60,000 in biodiesel infrastructure development funding including tanks and dispensing equipment and $360,000 for 1.2 million gallons of B-20 fuel to programs that support this initiative.

Results

In the past 18 months, 160 heavy-duty diesel vehicles have participated in the program including transit and school buses, class 7 and 8 diesel trucks and heavy-duty dump trucks. To date, over 615,000 gallons of B-20 have been used in these vehicles that have traveled more than 2.6 million miles.

NOCO Energy took the lead in providing the B-20 fuel to five local fleets including its own. Other participants include: Niagara Frontier Transportation Authority (NFTA), Kenmore-Tonawanda School District, Town of Tonawanda Highway Department, and the Town of Tonawanda Sewer and Water Department.

Results of the Western New York Biodiesel Initiative include:

- Displaced more than 123,000 gallons of diesel and reduced CO_2 emissions by 15%
- Cold weather operation was flawless. Coldest day on record for the project period- was -37 degrees F, coldest sustained temperature over a three-day period was -15 degrees F
- Seamless transition to the use of B-20 experienced
- Use of the fuel did not create any warranty issues with engine manufacturers
- Fuel economy of the B-20 was consistent with that of straight diesel
- There was no reported loss of engine power
- Routine maintenance schedules did not vary from previous time using regular diesel
- Major reduction in diesel odor and particulate matter emitted from the vehicles.

NYSERDA

For more information about these services, contact NYSERDA
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