

The Borough of Paramus operates 59 diesel fuel vehicles. Combined, these vehicles consume nearly 124,000 gallons of diesel fuel each year. In 2008, the Director of Fleet Operations for the Borough issued a report to the Mayor and Town Council. This report highlighted various fuel efficiency recommendations. The report paid particular attention to vehicles with lower emissions. Along with increasing fuel efficiency these vehicles reduce the impact the Borough has on the environment.

The report also made strong recommendations regarding Biodiesel conversion. It emphasized that the use of Biodiesel will result in improved fuel efficiency thereby reducing fuel consumption, while lowering carbon emissions. Increased efficiency will lead to reductions in annual fuel costs, and enhance environmental sustainability.

The Director made note that single vehicle Biodiesel conversion would not lead to significant efficiencies, as it would only affect that one vehicle. Since the Borough's fleet inventory is heavily weighted with diesel fuel vehicles, the Director recommended the purchase of a centrifuge machine. With the use of this piece of equipment the Borough's entire fleet of diesel fuel vehicles will be able to contribute toward the overall efficiencies and cost reductions.

The centrifuge utilizes centripetal force to remove impurities from used cooking oil, the cooking oil passes through several layers of filtration, with the final product resulting in pure, clean, and environmentally friendly non petroleum oil product. The oil is then mixed into the diesel fuel storage tanks, ready for use by the fleet.

With these facts in mind, in February of 2009, the Borough issued a purchase order for the centrifuge (see the attached documentation). The centrifuge was delivered, installed, and was ready for use in March.

The use of the centrifuge had immediate, measureable and lasting effects. The Borough's diesel fleet consumes nearly 124,000 gallons of diesel per year. The use of this Biodiesel mixture has reduced the amount of diesel fuel purchased by 5%

This translates into a savings of 6,200 gallons of diesel fuel, per year. At today's diesel cost of \$3.40 per gallon, the Borough has reduced its annual fuel cost by approximately \$21,000. Since the centrifuge was installed, the Borough has reduced its dependency for diesel by approximately 18,000 gallons, and has reduced total fuel cost by \$63,000, an incredible return on a \$1,290 investment. Along with the cost savings in fuel, the Borough has reduced emissions and thereby its carbon footprint, positively impacting the environment.

The Borough continues to collect used cooking oil from participating restaurants in the community, free of charge, and stores the oil in 55 gallon drums in the DPW facility until such time that the collected oil is converted to Biodiesel. This alone helps the community by ensuring the proper disposal of the cooking oil.