Location:

Rodefeld Landfill

Dane County, Wisconsin

Partners:

Dane County

BioCNG, LLC

Unison Solutions

ANGI

Madison College

Contact:

Kay Turgeson Assistant Business Manager BioCNG, LLC kay.turgeson@biocng.us (630) 410-7202

Feedstock:

Municipal Solid Waste

Maximum Annual Fuel Production:

91,250 Gasoline Gallon Equivalents (GGEs)

Vehicles Fueled:

30 vehicles and 2 snow plows are powered by R-CNG with plans to add 8 additional plows in 2014.

Pay Back Period:

Undisclosed

Plant Cost:

\$400,000

Received Funding:

No.

Technology Providers:

BioCNG, LLC

ANGI Energy Systems

Rodefeld Landfill



A Wisconsin Community earns top EPA award by showing how a biogas-to-vehicle system can work on a small scale.

Summary:

In January 2011, the first natural gas vehicle was refueled using biogas collected and refined from the Rodefeld Landfill in Dane County, WI. The facility has now been in operation for over two vears and fuels 30 vehicles with Renewable Compressed Natural Gas (R-CNG). The small landfill generates approximately 91,250 diesel gallon equivalents (GGEs) annually, at a cost as much as \$1.70 less per gallon than gasoline, amounting to considerable fuel savings over the life of the facility. There are two refueling stations at the landfill, and a third, delivering conventional CNG, located in nearby Madison. The BioCNG 50 System, at a cost of \$400,000, is intended for the smallest levels of commercial production, making it ideal for the Dane County project. The system was designed by Madison, WI-based BioCNG, LLC, a wholly owned subsidiary Cornerstone Environmental Group, and manufactured by Unison Solutions of Dubuque, IA. In January 2012, the EPA named this innovative facility the Project of the Year under the Landfill Methane Outreach Program (LMOP).

Financing:

The project was paid for with capital from Unison Solutions and Cornerstone Environmental Group. Both groups helped develop the technology and wanted to get the full size system — their first — up and operating. Dane County is in the process of purchasing and expanding the system, paid for through the sale of bonds and a \$150,000 Wisconsin State Energy Office (SEO) grant. An additional \$28,800 grant was given by the SEO to cover half the cost of five new CNG vehicles in 2013. There were no grants or tax credits involved in the financing of the pilot facility.