Biodiesel production facility in pipeline for Milwaukee

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By Michael Timm

Milwaukee could produce 50 million gallons of biodiesel per year starting as early as 2010, if the preliminary plans of a joint venture between Innovation Fuels and Tanco come to fruition at 1626 S. Harbor Dr.

In December 2008, Syracuse, N.Y.-based Innovation Fuels assumed NuStar Energy L.P.'s lease with the Port of Milwaukee and acquired the assets at NuStar's 10-acre terminal. NuStar, which refines and markets asphalt, is the second largest independent liquids terminal operator in the nation.

The acquisition positions Innovation Fuels, which has a 40-million-gallon biodiesel production facility in Newark, N.J., to not only distribute biofuels like ethanol and biodiesel but also produce biodiesel in Milwaukee.

Innovation Fuels and Tanco are currently upgrading the Milwaukee terminal, said Randy Barnhill, Midwest operations manager for the Innovation Fuels-Tanco facility.

Barnhill said they're in the planning stages for a biodiesel plant on-site. It's estimated the plant would have a total annual capacity of 50 million gallons, which would put it among the top 10 percent of such facilities in the world, Barnhill said. He said the target date for completion would likely be announced April or May of this year, though it would probably be spring 2010 before full-scale operations could begin.

The biodiesel would be produced from several different raw material sources from the Midwest and Canada. Barnhill anticipates the Milwaukee facility will process animal fat, canola, and soybean oil into biodiesel. Much of the animal fat would come from Wisconsin, but Barnhill said Wisconsin does not have a major soybean crushing facility, so soybean oil would likely come mainly from out of state.

These raw materials are mixed with alcohol and catalyst, Barnhill said, producing 10 percent glycerin and 90 percent biodiesel. Glycerin is shipped to different markets from cosmetics to animal feed; Innovation Fuels' primary biodiesel customer is the European market via Rotterdam, Barnhill said.

Until the market here develops, Barnhill anticipates Milwaukee biodiesel will also be shipped primarily to Europe for vehicle fuel, loaded directly into oceangoing vessels at the Port of Milwaukee, using a liquid cargo pier connected by pipe to the terminal.

Barnhill estimates 45 full-time construction jobs for a year would be created to build the plant, including pipe welders, electricians, millwrights, and tank fabrication crews. Once the plant is in full production, he estimates it would support 45 jobs, plus perhaps 150 more ancillary jobs.

The production facility will be housed inside a 20,000-square-foot warehouse at the terminal, consisting of the mixing system, settling tanks, and perhaps centrifuge to more quickly separate glycerin and biodiesel.

Barnhill said Milwaukee was the ideal location for this facility, adding that he feels the port is underutilized. “Logistics here are really the key.”

Eric Reinelt, Port of Milwaukee director, said the new green energy facility is a big step forward.

“This kind of business takes us in a new direction, one that we want to go in,” said Reinelt. He said it also represents a shift in emphasis at the port from dry bulk to liquid cargo, and makes use of underutilized assets, like the liquid cargo pier, which was used for asphalt.