DOE/EA-1848

FINDING OF NO SIGNIFICANT IMPACT
DEPARTMENT OF ENERGY LOAN GUARANTEE TO FULCRUM SIERRA BIOFUELS LLC, FOR A WASTE-TO-ETHANOL FACILITY IN MCCARRAN, STOREY COUNTY, NEVADA

AGENCY: U.S. Department of Energy, Loan Programs Office

ACTION: Finding of No Significant Impact

SUMMARY: The U.S. Department of Energy (DOE) conducted an environmental assessment (EA) that analyzed the potential environmental impacts associated with the construction and operation of a waste-to-ethanol facility (the Facility) for the production of ethanol from sorted[1] municipal solid waste (MSW) from which recyclables and non-biomass components have been removed (Feedstock) to be located entirely on approximately 16.77 acres of privately-owned land within the Tahoe-Reno Industrial Center (the TRI Center), in McCarran, Storey County, Nevada (the Site). DOE, through its Loan Programs Office, is considering providing a Federal loan guarantee pursuant to Title XVII of the Energy Policy Act of 2005 (EPAct 2005) to Fulcrum Sierra Biofuels, LLC (Fulcrum) to support construction of the Facility. The purpose and need for agency action is to comply with DOE's mandate under EPAct 2005 by selecting eligible projects that meet the goals of the Act. DOE is using the NEPA process to assist in determining whether to issue a loan guarantee to Fulcrum to support the proposed project.

Under the Proposed Action, Fulcrum intends to construct and operate the Facility for the production of ethanol. The Facility would use state-of-the-art, non-combustion, thermochemical conversion technology to convert Feedstock into ethanol. Feedstock is composed of the organic component of MSW derived from the residual materials remaining after recycling operations are performed by the material recovery facility (MRF). Feedstock includes paper and paperboard, yard trimmings, food scraps, wood, plastics, containers and packaging (such as milk cartons and plastic wrap), and durable (such as furniture) and non-durable goods (such as paper and clothing). The Facility is being designed to convert nearly 145,000 tons of Feedstock per year into 10.5 million gallons of ethanol and sufficient renewable electricity through self-generation for Facility operations. In producing ethanol, and ultimately combusting the ethanol as a replacement for gasoline, the total annual GHG emissions will be 18,300 tons per year. This effectively replaces 85,000 tons per year of GHG emissions that will be emitted from the production and combustion of conventionally produced gasoline, resulting in a net savings of 66,700 tons of CO2-equivalent GHG per year.

All discussion and analysis related to the potential impacts of construction and operation of the proposed facility are contained in the Final EA (DOE/EA-1848), which is incorporated herein by reference. DOE examined potential impacts on the following resources and found none to be significant: land use and visual resources; air quality; noise; geology and soils; water resources, including floodplains; biological resources; cultural resources; socioeconomics and environmental justice; utilities; transportation; waste management; public and occupational health and safety, including impacts related to intentionally destructive acts; and cumulative effects, including global climate change.

In accordance with applicable regulations and policies, DOE sent a notification letter regarding the Department's determination to prepare an EA to the Nevada State Clearinghouse on November 24, 2010. Copies of the letter were also sent to the Storey County Board of County Commissioners and six Indian Tribal governments. The letter described the proposed action and stated that a draft EA would be sent to

[1] MSW is sorted by a materials recycling facility (MRF), and the Facility will receive a selected stream of sorted MSW as Feedstock.

the state for review. On March 30, 2011 DOE sent the draft EA to the Nevada State Clearinghouse and invited their comments on the draft. Copies of the letter were also sent to the Storey County Board of County Commissioners and six Indian Tribal governments. The draft EA was also posted on the Loan Programs Office website. A letter supporting the project was submitted by the Business Manager of Local 350 of the United Association of Plumbers and Pipefitters. A letter was sent by the Nevada State Clearinghouse transmitting comments from the Nevada Department of Transportation, Department of Wildlife, and Division of Water Resources. The comments are included in the Final EA, Appendix D (Response to Comments), along with DOE's responses. No other comments were received.

DETERMINATION: On the basis of the Final EA, DOE has determined that providing a Federal loan guarantee to support construction of the proposed waste-to-ethanol facility in McCarran, Storey County, Nevada will not have a significant affect on the human environment. The preparation of an environmental impact statement is therefore not required, and DOE is issuing this Finding of No Significant Impact.

Copies of the Final EA are available at the DOE Loan Programs Office website at www.lgprogram.energy.gov/NEPA_DOC.html or from

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Additional information on the DOE NEPA process is available from

Office of NEPA Policy and Compliance
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585
202-586-4600 or 1-800-472-2756

Issued in Washington, DC on the 21st day of June in the year 2011.

for Jonathan M. Silver
Executive Director, Loan Programs