



Department of Energy

Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

DOE/EA-1832

FINDING OF NO SIGNIFICANT IMPACT RAINIER BIOGAS LLC, ENUMCLAW, WASHINGTON

AGENCY: U.S. Department of Energy, Golden Field Office

ACTION: Adoption of the U.S. Department of Agriculture Amended Environmental Assessment and a U.S. Department of Energy Finding of No Significant Impact

SUMMARY: The U.S. Department of Energy (DOE) has provided a grant of \$1.4 million and would authorize the expenditure of federal funding to Rainier Biogas LLC for the final design, construction, and initial operation of its Community Anaerobic Manure Digester (CAMD) Project in Enumclaw, King County, Washington. An amended environmental assessment (EA), completed by the U.S. Department of Agriculture (USDA), analyzed the potential environmental impacts associated with the proposed CAMD Project. The EA was completed by the USDA in response to a loan guarantee/grant application submitted to USDA Rural Development in Mount Vernon, Washington. All discussion, analysis, and findings related to the potential impacts of construction and operation of the CAMD are contained in the EA. Based on the EA, the USDA completed a Finding of No Significant Impact (FONSI) on September 1, 2010. DOE analyzed USDA's EA, conducted follow-on consultation, provided the EA for public comment, received no comments, and determined the EA adequate and satisfactory in describing the proposed project and the potential environmental impacts. Accordingly, DOE adopts the USDA EA, and incorporates it by reference into this FONSI.

The scope of the Rainier Biogas CAMD Project includes construction and installation of the CAMD facility to process up to 2,000 cows from 48 dairy farms and production of electrical power in Enumclaw, King County, Washington area. The facility would include an anaerobic manure digester, a concrete receiving pit, and a mechanical building with attached fiber storage area. There would also be one pipeline associated with the project. The project is needed to generate electricity while reducing emissions of carbon dioxide from fossil fuel combustion as well as to offer an alternative method to dispose of livestock manures that reduces emissions of methane and improves air and water quality.

Operation of the CAMD includes:

- Receive manure daily via approximately 10 truckloads and local pipeline;
- Process the manure to produce methane-rich biogas to generate electrical power to be sold to Puget Sound Energy and to produce heat for the digester. Excess biogas would be flared;
- Return the processed manure liquid and separated/dried fibers to originating farmers or sell to other farmers;
- Operational life of the facility is 30 to 50 years.

Decommissioning of the facility includes:

- Clean up buildings and other permanent structures that can be reused and leave in place,
- Remove and salvage process equipment, and



- Return other land to predevelopment conditions.

This FONSI was prepared in accordance with the *National Environmental Policy Act of 1969* (NEPA), the Council on Environmental Quality regulations for implementing NEPA, 40 CFR 1500 to 1508, and DOE NEPA procedures, 10 CFR 1021.322.

ENVIRONMENTAL IMPACT ANALYSIS: In compliance with NEPA, USDA's EA examines the potential environmental impacts of a decision to provide financial assistance for the proposed project. Under the No-Action Alternative, the USDA would not provide financial assistance and it is assumed the project would not proceed. The USDA FONSI included mitigation measures that must be met by Rainier Biogas LLC. As part of the adoption process, DOE reviewed USDA's EA for consistency with DOE's NEPA implementing regulations and procedures. USDA's environmental impact analyses are summarized as follows and are consistent with the impacts associated with DOE providing a grant to Rainier Biogas, LLC and authorizing the recipient to expend Federal funding.

The proposed CAMD Project would be constructed on approximately 20 acres of land owned by Ritter Dairy LLC. The CAMD Project will use a portion not to exceed 4 acres. The land is zoned Agricultural and Farm and is located in the King County Agricultural Production District. The USDA Natural Resource Conservation Service (NRCS) indicated that the site is not prime farmland. There is a potential for minor erosion during construction of the digester facility; however, best management practices for erosion control would be employed to prevent adverse impacts.

No floodplains, wetlands, or other waterways of the United States; no rivers included in the National Wild and Scenic Rivers Systems; or unique sensitive areas were identified within the proposed project area. Therefore, no impact to such waters or areas would result from the proposed project.

The facility will comply with the Washington State Department of Ecology (Ecology) guidelines for processing food waste in agriculture-exempt anaerobic digesters and will obtain an air emissions permit from the Northwest Clean Air Agency. Emissions from construction equipment would be intermittent and temporary during the 4- to 6-month construction period. Emissions would exist only during daytime working hours. Water spraying techniques would be used to control fugitive dust when necessary. Any future waste would be delivered in a sealed tank on a truck and pumped through an air-sealed connection to a covered collection tank. Thus, sources of odor during operations would be limited to the solid composting area, an enclosed area adjacent to the digester, only during the time while the solids recovered from the separator is being transferred to the area for temporary storage and while the solid material is being loaded onto trucks to be hauled away for sale.

Permit requirements ensure minimal impacts to water resources. Discharge permits would be approved by Ecology, including the State's Waste 2 Resources (W2R) program. The digester facility will comply with the Ecology's "Guidelines for Operating an Anaerobic Digester Exempt from Solid Waste Permitting." The W2R program will review Rainier Biogas LLC's operation to assess compliance with the conditions of solid waste handling permit exemption. Sale of post-digested liquid or solids into various soil amendments will be pre-approved by W2R to remain in compliance with the solid waste handling permit.

There are no hazardous wastes or radioactive wastes identified on or near the project area. Main sources of solid wastes or solid products generated at the facility include construction debris generated during the construction period and solid material separated from digester effluent during operations. The quantity of construction debris is estimated as equal to or less than a truckload per day. Construction debris would be hauled away to a licensed landfill site for disposal. Solids in the digester effluent would not be disposed

of as solid waste; rather, they would be transported to a composting area in the enclosed building for drying and eventual sale as bedding or soil amendment.

The number of truck trips used for delivery of construction materials to the proposed facility site and removal of construction debris would be about one per day; that for hauling away dried solid material for sale would average about one to two truck trips per day. Collection and delivery of manure in future years would require an additional ten truck round-trips per day. A few commuting vehicles are expected for a full-time operator of the facility and potentially a part-time worker during the operational period.

Socioeconomic impacts include employment of a full-time operator and potential part-time worker. Other impacts include the sale of the electric power to the grid and sale of soil amendments. Impacts would be positive. No communities with a high percentage of minority and low-income populations were identified that would experience impacts exceeding those identified for the general population. Disproportionately high and adverse impacts would be unlikely as a result of the proposed project.

The USDA, with concurrence from the Washington Department of Fish and Wildlife (WDFW), determined that none of the State-listed endangered species would be affected by the project, as habitat for these animals was not found at the project site during the WDFW review. It also does not appear the pipeline linking to the Wallin Dairy will cross any jurisdictional watercourses, so a Hydraulic Project Approval permit is not required for the project.

An historic and cultural resources project review was requested of the Department of Archaeology and Historic Preservation Office (DAHP) on May 17, 2010. The DAHP, by letter dated May 17, 2010, concurred with USDA's determination of the Area of Potential Effect (APE). On May 13, 2010, USDA sent letters to the following tribes, advising them of the proposed construction and requesting their assistance with information or comments on the project, the potential effect of the project, and any potential effect on the undertaking of any historic property that might be affected by the proposed project:

- Colville Tribe,
- Muckleshoot Tribe,
- Snoqualmie Tribe, and
- Yakama Nation.

One response was received from the Muckleshoot Tribe, requesting a cultural resources study. USDA ordered a study on June 3, 2010, and it was conducted by Equinox Research Consulting (Kelley Bush). No protected cultural resources or historic properties were identified during the study. On June 17, 2010, USDA forwarded a copy of this study to DAHP and the four tribes. DAHP responded on June 21, 2010, concurring with the determination of No Historic Properties affected.

A review of the National Register of Historic Places indicates the project site is not on the National Historic Registry. Washington State has no national memorials, national battlefields, national cemeteries, national seashores, or national parkways. In addition, according to the Washington State Department of Natural Resources Natural Heritage Information System website, as of July 21, 2009, parcel T40N R02E S21 does not appear as a surveyed land section identified as containing natural heritage features.

PARTICIPATION IN THE EA PROCESS: Public notice and involvement is not required for USDA Class 1 EAs except in cases where the action may impact certain protected resources, such as floodplains and wetlands (RD Instruction 1940.331(b)(4)). However, USDA posted a legal notice in the *Enumclaw Courier-Herald* between May 19 and 26, 2010. The notice pertained to "Public Notification of Possible Impacts to an Important Land or Cultural Resource." The notice described the project and location and requested comments concerning (1) the impacts of the proposed location on important farmland or

forestland, (2) alternative sites or actions that would avoid these impacts, and (3) methods that could be used to reduce these impacts. No comments were received.

Further, the USDA consulted with local, state, and federal agencies consistent with RD Instruction 1940.319(g) and Executive Order 12372, Intergovernmental Review of Federal Programs.

DOE's draft EA (DOE/EA 1832D) was made available on the DOE Golden Field Office website (http://www.eere.energy.gov/golden/Reading_Room.aspx) for public review and comment on September 13, 2010, for a 15-day comment period ending September 28, 2010. Public notices of the comment period were published in The Olympian Newspaper and The Enumclaw Herald newspaper on September 15, 2010. In addition, DOE sent postcards to interested parties announcing the EA's availability and opportunity to submit comments. No comments were received.

DETERMINATION: Based on the review of the USDA's EA, DOE determined authorizing the expenditure of Federal funding to Rainer Biogas, LLC to support the final design, construction, and initial operation of the CAMD would not constitute a major federal action significantly affecting the quality of the human environment within the context of NEPA.

Therefore, the preparation of an environmental impact statement is not required, and DOE hereby adopts the USDA *Amended Class I Environmental Assessment for Rainier Biogas LLC's Community Anaerobic Manure Digester Project* and issues this FONSI.

The final DOE EA is available at: http://www.eere.energy.gov/golden/Reading_Room.aspx

For questions about this FONSI, please contact:

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For further information on the DOE NEPA process, contact:

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