**Department of Energy**
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3393

January 14, 2009

**DOE/EA 1647**

# FINDING OF NO SIGNIFICANT IMPACT for the PROPOSED CONSTRUCTION AND OPERATION OF A CELLULOSIC ETHANOL PLANT, TREUTLEN COUNTY, GEORGIA

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

**ACTION:** Finding of No Significant Impact

**SUMMARY:** In October 2007, the U. S. Department of Energy (DOE) completed an environmental assessment (EA) that analyzed the potential impacts associated with the construction and operation of a proposed cellulosic ethanol plant in Treutlen County, Georgia. Subsequent to the issuance of a Finding of No Significant Impact (FONSI) for the October 2007 EA, changes were proposed for the design and operating parameters of the facility. In compliance with NEPA (42 U.S. Code [USC] §§ 4321 *et seq.*) and DOE's NEPA implementing regulations (10 Code of Federal Regulations [CFR] Section 1021.330) and procedures, DOE completed a supplemental environmental assessment (SEA) to examine the potential environmental impacts associated with the changes to the original project design, construction and operation.

The SEA evaluates the potential individual and cumulative effects of the modified project design relative to the No Action Alternative. The modified proposed action includes changes to proposed facility components, facility layout, construction and operation. No other alternatives are analyzed in detail. The October 2007 EA provides a discussion of alternate sites that were considered but determined to be unfeasible. This draft SEA was available to the public and to Federal, state, and local agencies for review and comment prior to DOE's final decision on the modified Proposed Action.

Potential impacts to the following resource areas are discussed in detail in the SEA:

- Land Use
- Noise
- Soils
- Hydrology
- Water Quality
- Wetlands
- Biological Resources
- Protected Species

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- Air Quality
- Waste Management (operations waste)
- Hazardous Materials
- Transportation
- Socioeconomic Factors (wood supply)
- Aesthetics

DOE, through its Golden Field Office, in Golden, Colorado, would provide funding to Range Fuels, Inc., a Colorado based corporation, to support the construction and initial operation of the proposed cellulosic biorefinery. All discussion, analysis and findings related to the potential impacts of construction and operation of the proposed cellulosic ethanol plant (including the applicant-committed practices presented in the Proposed Action) are contained in the October 2007 EA and all changes to the proposed action and associated impacts are included in the Final SEA. The Final SEA is hereby incorporated by reference.

The proposed modified cellulosic ethanol plant would utilize a two-step catalytic conversion process to produce ethanol and other usable byproducts. When at peak capacity, the plant would produce approximately 42,000,000 gallons of fuel-grade ethanol per year. In converting biomass to cellulosic ethanol, the amount of feedstock used in the process would be as much as 2,625 dry tons/day, consisting of a mix of forest residue and timber from Treutlen County and the surrounding area. Once produced, the ethanol would be sold as fuel for transportation. Up to 42,000,000 gallons per year of methanol and limited quantities of higher molecular weight alcohols ranging from propanol to pentanol would be produced as by-products of the process. These by-products would either be sold to reduce the absolute cost of the ethanol produced or recycled into the process. A portion of the methanol produced would be used as denaturant for the ethanol. The October 2007 EA evaluated the impacts associated with producing 100,000,000 gallons of fuel-grade ethanol per year using approximately 2,500 dry tons/day of feedstock. Additionally, the SEA evaluates the impacts associated with placement of fill in 0.54 acres of wetlands and 0.07 acres of wetlands that were cleared during initial site preparation work. These wetlands impacts were not part of the original site plan and therefore not included in the October 2007 EA.

DOE sent notices to interested local, State and Federal agencies, including the U. S. Fish and Wildlife Service, the Georgia Department of Natural Resources, and the Georgia Department of Transportation announcing the availability of the DSEA and requesting comments. Additionally, DOE published a public notice in a local newspaper announcing availability of the draft EA and inviting comments on the draft. DOE received no comments on the draft SEA.

## DETERMINATION

DOE determines that providing funding to support the construction and initial operation of the proposed cellulosic ethanol plant in Treutlen County, Georgia, would not constitute a major Federal Action significantly affecting the quality of the human environment, as defined by the National Environmental Policy Act. The applicant-committed measures

identified in the Proposed Action of the October 2007 EA as well as the SEA to obtain and comply with all required permits and minimize potential impacts through the implementation of construction and operation Best Management Practices and other identified design features shall be incorporated and enforceable through DOE's funding award documents to Range Fuels. In addition, DOE's funding award documents shall require that Range Fuels comply with all permits and associated provisions. This includes discharge monitoring and reporting, and all other conditions-of-operation specified in Range Fuels' National Pollution Discharge Elimination System Permit, federally enforceable state Air Quality Permit for construction and operation, Georgia Environmental Protection Division water withdrawal permit and U. S. Army Corps of Engineers Clean Water Section 404 wetland permit.

The preparation of an environmental impact statement is not required and DOE is issuing this Finding of No Significant Impact.

Copies of the Final SEA are available at the DOE Golden Field Office Public Reading Room website at http://www.eere.energy.gov/golden/Reading_Room.aspx or from:

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Issued in Golden, Colorado, the 16th day of January, 2009.

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