



Department of Energy

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

DOE/EA 1762

FINDING OF NO SIGNIFICANT IMPACT

WELLFORD LANDFILL METHANE AND GREENHOUSE GAS TO ENERGY PROJECT SPARTANBURG COUNTY, SOUTH CAROLINA

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

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: The U.S. Department of Energy (DOE) has provided a grant to Spartanburg County (County) and would authorize the County to continue to expend Federal funding to design, permit, and construct a landfill gas project to capture methane from the Wellford Landfill and use that gas to generate power for local industries.

The Wellford Landfill is the primary solid waste management facility for Spartanburg County. To take advantage of the methane produced there and reduce greenhouse gas emissions from the facility, the County proposes to construct the infrastructure necessary to collect, treat, and transmit landfill gas to the Milliken Dewey Plant in Inman, South Carolina, where the gas would be used as a replacement fuel for a steam boiler. The proposed project would include construction of a landfill gas collection system, a gas treatment and pressurization facility, and a 6.6-mile-long gas transmission pipeline to convey 500 cubic feet per minute of gas to the Milliken Dewey Plant. Any gas beyond the 500 cubic feet per minute sent to the Milliken Dewey Plant would be used to fuel a generator installed at the Wellford Landfill. The generator will create electricity to be sent to the electrical grid.

This FONSI supports DOE's funding of the design, permitting, and construction of the Wellford Landfill Methane and Greenhouse Gas to Energy Project in Spartanburg County, South Carolina. All discussion, analysis, and findings related to the potential impacts of construction, including the applicant-committed mitigation measures, are contained in the final environmental assessment (EA), which is hereby incorporated by reference.

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 1500-1508), and DOE NEPA regulations (10 CFR 1021.322).

ENVIRONMENTAL IMPACTS: In compliance with NEPA and the DOE NEPA implementing regulations, the EA examined the potential environmental impacts of DOE's proposed decision to allow Spartanburg County to expend Federal funding and also examined a No-Action Alternative. Under the No-Action Alternative, DOE would not authorize Spartanburg County to spend Federal funds on the

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proposed project and DOE assumes for purposes of the EA that the project would not proceed without this financial assistance.

The gas collection, treatment, and pressurization system; new generator; and associated infrastructure would be installed on disturbed lands at the Wellford Landfill and would not affect ongoing operations there. The pipeline to the Milliken Dewey Plant would be buried and would be located primarily within the right of way of existing roads. Operation of this equipment would not result in new hazardous waste streams or require hazardous materials for operation. Based on this and other information, DOE concludes that Spartanburg County's proposed project would have no or minimal impacts on land use, transportation and traffic, noise, aesthetics, utilities, infrastructure, and health and safety.

Spartanburg County is in attainment for all currently applicable National Ambient Air Quality Standards. The proposed project could have a short-term, localized adverse impact on air quality during construction, but would have a long-term beneficial effect on air quality in the region. Methane produced at the landfill, which is currently flared and released into the atmosphere, would be captured and more completely combusted for the generation of steam and electricity. DOE estimates that this project would result in a reduction of greenhouse gas emissions equivalent to 86,155 tons of carbon dioxide annually. Operation of the new generator at the landfill would be in compliance with State and Federal air emission standards and has been permitted by the State of South Carolina.

The majority of the soils along the pipeline corridor have been disturbed by construction of the adjacent roads and installation of utilities. Land adjacent to the landfill and pipeline corridor would not be impacted, and post-construction grades along the gas transmission pipeline would be returned to pre-construction conditions. The proposed project would not result in the loss of any cultivated lands, and no loss of prime or unique farmlands would occur.

The proposed project would not affect any public or private water supply wells. Construction of the proposed facilities at the Wellford Landfill would result in a small increase in impervious surfaces; however, the associated increase in stormwater runoff would be accommodated by the existing capacity of the stormwater management system and detention basin at that site. Horizontal directional drilling would be used to install the pipeline under a lake and two other major surface waters; thus, surface waters, including regulated waters of the United States, would not be affected by installation of the pipeline. At the landfill and in upland areas along the pipeline corridor that would be trenched, best management practices, such as silt fences, rock check dams, and seeding and mulching, would be implemented to manage soil erosion and stormwater runoff. Based on these findings, DOE concludes that the proposed project would not adversely affect water resources.

Native plants and animals would not be affected during installation or operation of equipment at the previously developed landfill and Milliken Dewey Plant industrial site. Impacts to biological resources along the project transmission pipeline corridor would be minimal because the pipeline would be located primarily in maintained right-of-ways along existing roadways. Most aquatic habitat along the transmission pipeline corridor has been previously disturbed by the construction of roads and other human activities, and habitat at major surface water crossings would not be further disturbed because directional drilling would be used to install the pipeline at those locations.

One plant species, the dwarf-flowered heartleaf, protected under the Federal *Endangered Species Act*, occurs in Spartanburg County. The only suitable habitat for that species within the pipeline corridor

occurs along Lake Cooley and other major stream crossings. Those areas were searched and no dwarf-flowered heartleaf plants were found. Directional drilling would be used to install the pipeline under major surface water crossings and potential habitat for this species would not be disturbed. DOE therefore concludes that Spartanburg County's proposed project would not affect the dwarf-flowered heartleaf or any other species protected under the Federal *Endangered Species Act*.

A survey for cultural resources was conducted within the proposed project footprint. That survey included a review of previous investigations of cultural resources in the area and shovel tests along the pipeline route. No archaeological sites or isolated finds were found during the field review and no previously recorded cultural resources were discovered within the project footprint. DOE has concluded that Spartanburg County's proposed project would not affect any historic properties and the South Carolina State Historic Preservation Officer has concurred with this conclusion.

The proposed project would result in the creation of about 24 new, temporary construction jobs and one new permanent job for operation of the LFG collection and treatment systems at the landfill, and would aid in retaining 115 jobs at the Milliken facility by reducing operating costs for the plant. The project therefore would have a beneficial impact on the local economy. As illustrated in the EA, no significant adverse impacts would occur to any members of the communities in or near the project area; therefore, there would be no adverse and disproportional impacts to minority or low-income populations.

DOE evaluated the cumulative impacts of the proposed project and other past, present, and reasonably foreseeable projects in the area, including Spartanburg County's plans for further development of the Wellford Landfill, the ongoing transition of the region to industrial and urban land uses, and the expansion of the utility infrastructure and road network to support growth in the area. DOE concluded that Spartanburg County's proposed project, in conjunction with other activities considered, would have no or minimal cumulative impacts on air quality, soils, water resources, biological resources, and cultural resources within the project area and surrounding region.

PUBLIC PARTICIPATION IN THE EA PROCESS: DOE sent scoping letters to regulatory agencies and other potentially interested agencies, organizations, and individuals, and posted the scoping letter on the DOE Golden Field Office Public Reading Room web site on May 14, 2010. The scoping letter described DOE's Proposed Action and requested assistance in identifying potential issues to be evaluated in the EA. In response to the scoping letter, DOE received comment letters from seven agencies and tribal organizations. Comments received along with responses, as appropriate, are summarized in Table 1-1 of the EA. Additionally, DOE or the County of Spartanburg sent consultation letters to key agency and tribal representatives, including the South Carolina Department of Health and Environmental Control, the South Carolina State Historic Preservation Officer, the U.S. Fish and Wildlife Service, and four Indian tribes. These letters are contained in Appendices B and C of the EA.

DOE issued the draft EA for comment on September 1, 2010, and posted it on the DOE Golden Field Office Public Reading Room web site. DOE sent to interested parties an announcement of the availability of the draft EA and 15-day public comment period. The comment period ended on September 14, 2010. DOE did not receive any comments on the draft EA.

DETERMINATION: Based on the information presented in the final EA (DOE/EA 1762), DOE determines that providing funding to Spartanburg County for the design, permitting, construction, and operation of the Wellford Landfill Methane and Greenhouse Gas to Energy Project 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 is issuing this FONSI.

The County's commitment to obtain and comply with all appropriate Federal, State, and local permits required for construction and operation of the methane and greenhouse gas to energy project, and to minimize potential impacts through the implementation of best management practices detailed in the final EA, shall be incorporated and enforceable through DOE's financial assistance agreement. The final EA is available at http://www.eere.energy.gov/golden/Reading_Room.aspx.

For questions about this FONSI, contact:

Melissa Rossiter
U.S. Department of Energy
1617 Cole Boulevard
Golden, Colorado 80401
melissa.rossiter@go.doe.gov

For further information about the DOE NEPA process, contact:

Office of NEPA Policy and Compliance
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585
202-685-4600 or 1-800-472-2756

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Carol Battershell
Acting Executive Director for Field Operations