PMC-EF2a

(2.04.02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: Illinois Department of Commerce & Economic Opportunity **STATE:** IL

PROJECT TITLE : WM Renewable Energy, LLC; Milam Landfill Gas to Energy Plant II

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	EE0000119	GFO-10-363	EE119

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:
Description:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The Illinois Department of Commerce & Economic Opportunity will provide WM Renewable Energy, LLC (WM) with $2,390,500 in Recovery Act funds to install a combined heat and power (CHP) facility at the Milam Landfill. The funds will be used to purchase engines, switchgear, and a gas compressor for the Milam Landfill Gas to Energy Plant II. The landfill already has a permitted gas-to-energy plant at the site.

The facility will be located on the north side of the Milam landfill, which is located near I-55 and Route 203 North. The Milam landfill footprint covers 176 acres and is operated under IEPA Permit #1991-152-LFM. Approximately 166 acres is covered under an existing landfill gas collection and control system (GCCS). The remaining acreage (approximately 10 acres) will be constructed once these areas are at final grade. The GCCS consists of 70 of 75 landfill gas wells and over 8,000 linear feet of on-site header and lateral pipeline. Current operations apply a vacuum to the system to extract landfill gas for the existing gas-to-energy plant. The same approach will be used to supply gas to the new plant.

The entire Milam landfill facility, including the area for the proposed plant, has clearance letters from U.S. Fish & Wildlife, IDNR, and Illinois Historic Preservation Agency. The proposed facility engines will be fueled by 100% landfill gas to produce electricity. The proposed facility will require 2,400scfm of landfill gas at 50% methane and <2% oxygen. Current gas quality and quantity meet these requirements. The gas enters the compressor at approximately 80 and 90 degrees F, filtered, super heated, then cooled, and finally reheated to 110 degrees F. Other than liquid removal, it is anticipated that no other treatment of the landfill gas will be necessary.

The landfill gas-to-energy plant will be placed at the existing Milam Recycling and Disposal Facility, which already has a gas-to-energy plant. The plant design is such that it will be able to tap into the infrastructure of the existing gas-to-energy plant. Current permits for the facility will be updated to accommodate the new plant. In view of the information provide by the State and recipient, this activity is consistent with provisions listed in categorical exclusion B5.1.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

According to the project officer, funding for this project is $2,390,500. Unless there is a significant change in scope, a change in funding will not affect my determination.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/21/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.

☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____

Field Office Manager