PMC-EF2a
(2.04.02)

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

RECIPIENT: Ohio Department of Development **STATE:** OH

PROJECT TITLE : PNA Solar

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000165		0

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 Ohio Department of Development proposes to award Hull & Associates, Inc. $680,782 of Recovery Act funds to install a 250 kW solar array on the Pilkington North America, Inc. (PNA)'s Plant 21 site in the City of Northwood, Wood County, Ohio.

The project site is located on approximately 176 acres, of which approximately 140 acres exists as an unregulated landfill. A research and development center occupies the remaining approximate 36 acres. The area upon which the solar array will be placed is a capped former sand pond, containing glass grinding and polishing waste material (waste sand). The cap area is maintained with vegetation to minimize desiccation and contains storm water drainage structures to convey storm water away to minimize water infiltration. A maintained leachate collection system serves to isolate contaminates from the environment. The solar array installation and supporting concrete platforms will be positioned atop the clay cap of the main sand pond, which is approximately 60 feet above the ground surface. The installation will not penetrate into the waste sand or otherwise come into contact with waste material.

The surrounding land to the south and east is zoned industrial and the surrounding land to the north and west is zoned industrial, commercial, and residential. The facility to the south is an operating solid waste landfill, with a final proposed height of approximately 115 feet above the ground surface. The property to the immediate north was formerly owned by Pilkington and contains an industrial building formerly used to store glass products.

The project area is located adjacent to Otter Creek watershed, which is a Lake Erie Tributary. Due to the industrial nature of the Site and surrounding area, Otter Creek is routed through an underground conveyance system so as to minimize any potential impact to surface water by industrial activities in the area. There are low quality emergent wetland areas in the vicinity of the project area, but the citing of the solar array project will not impact wetland areas or native plant or animal species.

The area where the solar array will be installed had been used to dispose of ground and polished glass (waste sand). The sand generated as a byproduct of the operations contained varying amounts of arsenic. Leachate from the sand ponds typically has an elevated pH, is dark in color, and contains elevated levels of dissolved solids, arsenic, and phosphorous. The leachate collection system within the fill area extracts any liquids within the unit for discharge to the City of Toledo Wastewater Treatment Plant (WWTP). Discharges from the site to the WWTP are below Ohio EPA Pretreatment standards and within the allowable City of Toledo industrial limits. The project will minimize disturbance to the cap in accordance with Ohio EPA guidance and follow Ohio EPA permitting guidelines for construction, including erosion control, such as gravel and vegetative ground cover; runoff control, such as diversion berms; sediment control, such as silt fence and sediment traps; and other non-sediment pollutant controls.

The system has been designed as a 250 KW DC photovoltaic solar energy facility. The solar energy facility will consist of 3,336 panels mounted on concrete platforms. Steel and aluminum racking will be used to secure the panels, and the racking will be bolted to concrete platforms. The array will consist of Forty-three (43) rows consisting of seventy-eight (78) interconnected panels and connected to the grid through a net-metering arrangement with Toledo Edison. The connection will either be through the 480 volt line directly into the facility switchgear or the 13.2kV line from Toledo Edison to the facility.

Based on information from the U.S. Fish and Wildlife Service, no component or construction activity related to the solar array (solar panels, power poles, etc.) will impinge upon any wetland area in the vicinity of the project. Through communications with the Ohio EPA, the Brownfield site, facility, and project area is not subject to OAC Rule 3745-27-13 on landfill permitting.

Based on information submitted by the State and applicant,
* that the site is a closed landfill with an approved cap,
* that stormwater runoff and leachate controls meet State of Ohio EPA requirements,
* that leachate and runoff data show contaminant levels from historical dumping practices that are well within State and local pretreatment levels,
* that the project is not intended to disturb the cap or the landfill contents below and thus there should be no effect on current leachate or runoff levels,
* that the area to be effected is previously disturbed,
* that the project is in an area of heavy industrial development, and
* that the citing of the solar array will not impact local wetlands or native plant or animal species,
I have determined that the project is classified as Categorical Exclusion B5.1.

NEPA PROVISION

Note to Specialist :

According the Project Officer, the funding associated with this project is $680,782. Unless there is a significant change in scope, any change in funding will not affect my determination.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 3/3/10

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