PMC-EF2a
(2.04.02)

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

RECIPIENT: City of Mesa **STATE:** AZ

PROJECT TITLE : City of Mesa Reclamation Blower Units

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000840	GFO-0000840-002	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 City of Mesa (COM), Arizona proposes to use $749,500 of EECBG funds for blower retrofitting activities at the South East Wastewater Reclamation Facility (SEWRF). The purpose of this project is to retrofit the SEWRF with turbo blowers and fine bubble aeration. This energy efficiency project will replace the existing 400 hp blowers and coarse bubble diffusers with 250 hp turbo blowers and fine bubble diffusers. The existing blowers are oversized and inefficient and the proposed changes will result in an overall cost and energy savings.

Projections for energy savings are 1,989,797 kWh annually. This estimated 67% reduction in electric use is due to the lower horsepower motors, the turbo blowers being equipped with internal VFD's, turndown option features during periods of low flow to reduce hp needs and benefits of fine bubblers which increase oxygen efficiencies requiring less energy for wastewater treatment aeration processes. Approximate costs savings will range between $1-2million based on reduced Operation and Maintenance Fees.

The COM SEWRF project team is still determining what will be done with the existing blowers. It has been determined that the existing blowers will not serve as emergency back-up as originally considered, due to expense of maintaining dual process controls. The team is currently reviewing the feasibility and cost of reuse, resale or salvaging the existing blowers. If the blowers are salvaged the COM will have proper procedures in place to document that the salvage and disposal is done in compliance with all Federal, State and Local requirements. It is anticipated that parts of the blower that have salvage value will be recycled, parts with no salvage value that are considered non-hazardous waste will be properly disposed at a solid waste landfill and any hazardous waste will be disposed of at a hazardous waste landfill. It is not anticipated that any hazardous waste will be generated from this project.

All proposed activities will take place within an existing facility and therefore, will have no impact on any biological, environmental, or sensitive resources. No alterations to the building footprint will occur as a result of the proposed activity.

The State of Arizona and Department of Energy have executed a Programmatic Agreement covering historic preservation for EECBG. Pima County is constructing a wastestream plan and will have it finalized prior the start of any retrofitting activities.

Based on the above GHG emission reductions and annual cost avoidance which will result from the proposed activity, this project is Categorically Excluded from further NEPA review under CX Number B 5.1, Actions to Conserve Energy.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Completed by B.Knapp

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 5/16/2011

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