

PMC-EF2a

(2.04.02)

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



RECIPIENT: Iowa Office of Energy Independence

STATE: IA

PROJECT TITLE : EECBG - Washington Stewart Elementary Improvements

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
EE FOA 0000013	EE0000812		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:

B1.3 Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (e.g., pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed. Custodial services are activities to preserve facility appearance, working conditions, and sanitation, such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal. Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Routine maintenance may result in replacement to the extent that replacement is in kind and is not a substantial upgrade or improvement. In kind replacement includes installation of new components to replace outmoded components if the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to: (a) Repair of facility equipment, such as lathes, mills, pumps, and presses; (b) Door and window repair or replacement; (c) Wall, ceiling, or floor repair; (d) Reroofing; (e) Plumbing, electrical utility, and telephone service repair; (f) Routine replacement of high-efficiency particulate air filters; (g) Inspection and/or treatment of currently installed utility poles; (h) Repair of road embankments (i) Repair or replacement of fire protection sprinkler systems; (j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing; (k) Erosion control and soil stabilization measures (such as reseeding and revegetation); (l) Surveillance and maintenance of surplus facilities in accordance with DOE Order 5820.2, "Radioactive Waste Management"; (m) Repair and maintenance of transmission facilities, including replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed transmission lines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions); (n) Routine testing and calibration of facility components, subsystems, or portable equipment (including but not limited to, control valves, in core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes); and (o) Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), including removal of contaminated intact equipment and other materials (other than spent nuclear fuel or special nuclear material in nuclear reactors).

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 Washington, Iowa proposes to use \$1,000,000 of EECBG funds to install a new 81.4 ton closed loop ground source heat pump system to replace a failing boiler system at the Washington Stewart Elementary School. In addition, the project will include an upgrade of the electrical service, new lighting throughout the facility, energy efficient window and door retrofits, relocation of a sidewalk, tuck pointing of the existing 1938 building and patching interior water damage. With the exception of the tuck pointing, the building work will affect windows, doors, and ceiling tiles installed in the 1970's.

The system will consist of approximately 100 boreholes drilled to a depth of approximately 300 feet. Drilling will be contained to less than one acre on what is currently the school's ball field just to the north of the existing school. The heat exchange fluid will consist of a 35% propylene glycol/water mixture. Thermally enhanced bentonite grout will be

used to case the well. The drilling will be performed by a state licensed driller, and installation of the ground source heat pump system will follow all guidelines set forth by the International Ground Source Heat Pump Association and the National Ground Water Association. The installer will have an Iowa Ground Source Heat Pump Association IGSHP certification and at least three years experience.

Excavation within the defined area would involve trenching for connection of wells to the new main vault. The vault location will involve excavation approximately 10 feet deep, 12 feet wide and 20 feet long. Additional trenching between the vault and the existing basement mechanical room of 2 feet wide by 6 feet deep will take place to allow installation of connection piping.

Once the well field drilling and piping are completed, the surface will be graded back to the existing configuration for continued use as baseball fields. Drilling spoils will be placed into piles until stabilized then disposed off site as general fill. Any damage to the existing asphalt play area will be repaired as a part of this project.

There are no water features adjacent to the project area and there will be no impacts to wetlands, waters, or floodplains. There will be no impacts to any biological resources including threatened and endangered species, general wildlife and sensitive habitats as the project is located in a highly developed urban area.

The Iowa Historic Preservation Office has determined that no historic properties will be affected by the proposed project.

In March 2009, the Iowa Department of Natural Resources (DNR) issued an Administrative Consent Order to the Washington Community School District for violation of the National Emission Standards for Hazardous Air Pollutants for removal and improper disposal of floor tiles and pipes containing asbestos during a renovation project. According to the DNR, Washington Community School District paid a \$4,000 penalty and DNR considered the issue resolved and the order closed.

Based on the above information, it has been determined that the proposed projects will not have a significant impact to human health and/or the environment. Therefore the proposed project is Categorical Excluded from further NEPA review under B1.3 - Routine maintenance and custodial services and B5.1 - 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 :

The recipient must provide the DOE a waste stream management plan prior to beginning any construction activities if any project activities include renovation or demolition of asbestos containing materials including but not limited to floor tiles, ceiling tiles and pipes.

This EF-2a was prepared by Chris Paulsen.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

NEPA Compliance Officer

Date: _____

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: _____