

PMC-ND

(1.08.09.13)

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION



RECIPIENT: Fort Bragg, NC

STATE: NC

PROJECT**TITLE:**

Fort Bragg HEDS + Integrated EMS to Reduce Mold, Corrosion, Energy + Water Waste, 2143-1522

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002143	DE-EE0009035	GFO-0009035-001	

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

CX, EA, EIS APPENDIX AND NUMBER:

Description:

- A9 Information gathering, analysis, and dissemination** Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
- B1.31 Installation or relocation of machinery and equipment** Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.
- B1.4 Air conditioning systems for existing equipment** Installation or modification of air conditioning systems required for temperature control for operation of existing equipment
- B2.4 Equipment Qualification** Activities undertaken to (1) qualify equipment for use or improve systems reliability or (2) augment information on safety-related system components. These activities include, but are not limited to, transportation container qualification testing, crane and lift-gear certification or recertification testing, high efficiency particulate air filter testing and certification, stress tests (such as "burn-in" testing of electrical components and leak testing), and calibration of sensors or diagnostic equipment.
- B5.1 Actions to conserve energy or water** (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as

RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the US Army at Fort Bragg (Fort Bragg, NC) to develop, fabricate, and test a novel Heating, Ventilation and Air Conditioning (HVAC) system, utilizing High Efficiency Dehumidification System (HEDS) technology. This system would be designed to be both mold resistant and energy efficient. Four (4) HVAC systems would be fabricated and installed at existing barracks facilities at Fort Bragg that have presented mold growth. The HVAC systems would then be tested for performance over the course of a cooling season. The project would be structured as a Utility Energy Service Contract (UESC), in which energy savings and cost offsets would be used to fund system repairs and upgrades.

Proposed work would encompass three broad areas: System design and development, HVAC fabrication, and equipment installation/testing.

System design and development work would be performed by Conservant Systems, Inc. at their office in Laguna Hills, CA. This would include development of logging measurements/info on existing facilities, development of engineering specifications/performance requirements, and development of bidding documents for installation of the HVAC devices.

Equipment fabrication would be performed on contract by either Hale Industries (Fortville, IN) or Air Enterprises (Akron, OH). Equipment fabrication would involve the use of potentially hazardous materials, including metals and industrial solvent, as well as heavy machinery. Hale Industries and Air Enterprises both regularly manufacture HVAC systems and associated equipment. If contracted to produce equipment, each entity would adhere to its established corporate health and safety policies and procedures. Protocols would include employee training, the use of personal protective equipment (PPE), engineering controls, monitoring, and internal assessments.

Equipment installation would occur at various barracks facilities located at Fort Bragg, NC. A qualified installer would be selected after commencement of the project, to perform installation work. A total of four (4) HVAC systems would be installed and monitored throughout this period. The HVAC systems would either be installed in the interior of the facility, in an existing HVAC equipment room, or adjacent to the facility on a new concrete equipment pad. Concrete pads would measure approximately 10'W and 22' L. These would be constructed in previously disturbed areas adjacent to the barracks facilities' HVAC equipment rooms. Construction of the concrete pads would consist of topsoil removal (approximately a foot of soil), backfilling with engineered fill, installation of a rebar frame, and pouring of concrete. In total, this would require less than 40 cubic yards of excavation, and less than 50 cubic yards of backfill and concrete. Installation work would also require the drilling of small holes in the walls of the selected barracks facilities in order to provide access for piping and electrical connections between outdoor/indoor equipment. The HVAC equipment would have an approximate size of 7' H x 8' W x 18' L, at installation. Following installation, the HVAC equipment would be commissioned and monitored for one cooling season.

Installation work would adhere to established health and safety policies and procedure at Fort Bragg. Protocols would include employee training, the use of personal protective equipment, engineering controls, monitoring, and internal assessments.

Because Fort Bragg is part of a Federal agency it is required to comply with NEPA for this project. This would include completing an environmental review for the project including any necessary consultations and geotechnical or other surveys prior to a decision whether to proceed. If Fort Bragg proceeds with the proposed project after their NEPA review they would be required to obtain all necessary permits and follow appropriate environment, health and safety measures. Fort Bragg must provide its final NEPA determination(s) to their DOE FEMP Technical Project Officer or point of contact.

This DOE grant is a secondary funding source for this project and comprises approximately 25% of total project funding. Primary funding will come from Fort Bragg.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

The Recipient is a Federal agency and is also required to comply with NEPA. When the Recipient has completed its NEPA review process for the proposed project, the Recipient will provide its final NEPA determination(s) to their DOE FEMP Technical Project Officer or point of contact.

Notes:

Federal Energy Management Program

This NEPA determination requires a tailored NEPA provision.

Review completed by Jonathan Hartman, 5/28/2020

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

 Electronically
Signed By: **Roak Parker**

NEPA Compliance Officer

Date: 5/28/2020

FIELD OFFICE MANAGER DETERMINATION

- ☒ Field Office Manager review not required
☐ Field Office Manager review required

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

Field Office Manager's Signature:

Field Office Manager

Date: