The proposed action would install new replacement equipment as part of upgrades to Test Reactor Area (TRA0-703 (Advanced Test Reactor [ATR] Cold Waste Pit) to achieve more system reliability and to address safety concerns. The current system utilizes a single motor starter cabinet (with three motor starters), push buttons, water level monitoring/pump control float type system and relays to control the pumps and water level. The new system would incorporate three variable frequency drives (VFD) and two different styles of water level monitors to control pump speed. Each of the three VFDs would have a separate power disconnect switch near the VFD panel to aid in the lockout/tagout of the system. The current water level float system would be replaced by an Emerson direct contact water probe and Emerson ultrasonic sensor. A Redline Graphite controller (i.e., a human-machine interface) would also be installed. A new Quonset building with associated lighting, heating and cooling would be placed to house the electrical and operator station components. The proposed action would also include the fabrication and installation of a new guard/handrail around the perimeter of the cold waste pit and modification of the existing access ladder to make it more ergonomic for the user.

The power going to the flow meter will be out of service due to loss of power no greater than 4 hours. During the modification, the effluent discharge to the Cold Waste Pond will be accomplished through the normal flow path to the pond with at least one of the three available pumps.

Projected Start Date: October of 2014
Projected End Date: November of 2014
Estimated Cost: Approximately $217,000

Environmental Aspects or Potential Sources of Impact:

Air Emissions: Excavation activities associated with the project may generate fugitive dust emissions. Reasonable precautions (water, dust suppressant chemicals, etc.) will be taken to prevent dust from becoming airborne during excavation. Steps taken to control fugitive dust, such as water spray, will be documented in project records in accordance with Title V Air Permit requirements.

Generating and Managing Waste: Small amounts of industrial waste are anticipated. All waste generated would be coordinated with Waste Generator Services (WGS) for proper disposition.

Releasing Contaminants: All chemicals would be managed in accordance with laboratory procedures.

Using, Reusing, and Conserving Natural Resources: All applicable waste will be diverted from disposal in the landfill when possible. Project personnel will use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. The project will practice sustainable acquisition, as appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, are bio-based in content, environmentally preferable, non-ozone depleting, have recycled content, or are non-toxic or less-toxic alternatives. New equipment will meet either the Energy Star or Significant New Alternatives Policy (SNAP) requirements as appropriate (see https://sftool.gov/green-products/0?agency=0).

SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, 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 or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not “connected” to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

References: 10 CFR 1021, Appendix B to Subpart D items B2.5, "Facility safety and environmental improvements" and 1.15 "Support buildings."

Justification: The proposed action is consistent with 10 CFR 1021, Appendix B to Subpart D categorical exclusion B2.5, "Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities" and 40 CFR part 280,
"Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks"). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel);" and "Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.5, B6.6, and B6.10 of this appendix."

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act)   □ Yes  ☒ No

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on: 9/22/2014