



National Nuclear Security Administration Categorical Exclusion Determination Form



NEPA ID#: HEDLP 15-001-001

Proposed Action Title: Installation of RWMC Monitoring Well UE5MW-4 (NV-2019-012)

Program or Field Office: Nevada Field Office

Location(s) (City/County/State): Nevada National Security Site (NNSS), Nye County NV

Proposed Action Description:

To extend the operational lifespan of the Area 5 Radioactive Waste Management Complex (RWMC) and remain in compliance with Federal regulations, specifically the Resource Conservation and Recovery Act (RCRA), installation of a new groundwater monitoring well is required. There are currently three wells in service, and to meet the RCRA requirement for down gradient wells, a fourth well must be installed south of the current and future RCRA waste disposal cells. This requirement was codified by the State of Nevada in the last revision of RCRA Permit HW0101. To meet this requirement, one monitoring well would be constructed on the south side of the Area 5 RWMC.

Site preparation would include clearing/grubbing, grading, excavating and leveling areas for the drill pad, equipment staging, and drilling/sump/settling sump. The area affected would be approximately one (1) acre. A drill pad would be located within the 1-acre site.

An unlined sump would be located within the drill pad area. The size of the sump would be in the range of 40 feet long and 15 feet wide and 5 to 10 feet deep with the top of the sump at or near ground level. The cuttings/soil from the borehole and associated circulating fluid would be deposited in the sump where water will be allowed to evaporate and/or infiltrate into the ground.

Cleared materials including plants and non-hazardous debris would be disposed of at an on-site solid waste landfill. Any excess soil generated would be relocated in the general area.

The well would be started with a conductor hole approximately 120 feet deep. The conductor hole would be drilled using a dry-hole auger and cased with carbon steel casing and the casing annulus cemented to the surface. The main borehole would be drilled below the conductor casing to a total depth of 900 feet below ground surface using dual reverse circulating method with air and water.

After drilling, the hole would be completed with stainless steel casing and a submersible pump on stainless steel tubing would be installed. A transportainer would be installed over the wellhead and a small generator would be used to power the pump for sampling. The access road would be maintained to allow access for sampling. Any dried cement remaining in the sump would be removed and disposed of in an on-site landfill as non-hazardous waste. The sump would be backfilled and graded.

Categorical Exclusion(s) Applied:

10 CFR 1021, Appendix B, B3.1 Site Characterization and environmental monitoring

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions including the full text of each categorical exclusion, see Subpart D of 10 CFR 1021. Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D.

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

The proposal has not been segmented to meet the definition of a categorical exclusion.

Based on my review of information conveyed to me and in my possession concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action and that other regulatory requirements set forth above are met. Therefore, the application of a categorical exclusion is appropriate.

NEPA Compliance Officer: Carrie Stewart

Date Determined: 4/01/2019