



# National Nuclear Security Administration Categorical Exclusion Determination Form



NEPA ID#: HEDLP 15-001-001

---

Proposed Action Title: U1a Modernization Surface- Seismic Monitoring of U1a drilling activities (NV-2019-017.01)

Program or Field Office: Nevada Field Office

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

---

Proposed Action Description:

Seismic monitoring of existing sensors would be conducted to support U1a activities in and around the vicinity of the U1a complex. Extra geophone sensors and recorders would be used to monitor borehole drilling at U1a. Sensors may be used and monitored during mining and drilling activities. Monitoring would also be conducted during any aftershock period following a Magnitude 3.0 or larger earthquake where the epicenter is determined to be within the NNSS boundaries.

It is required that the sensors have recorders, and the proposed type would be Inova Hawk 3-channel recorders powered by 12VDC battery packs. The Inova Hawk units broadcast a standard WiFi signal that would be used for Quality Control purposes. However, other types/brands of sensors may be used. A handheld computer would be used to gather Quality Control data on a weekly basis.

There would be approximately 37 sensors installed along all boundaries of the U1a complex over the next 12 months or until drilling is complete. Sensor stations would be sited within 100 ft of an existing passable road. Sensors are monitored by workers walking off-road. There would be no off-road driving and no surface disturbances as a result of monitoring activities. The geophone proposed would be a 5Hz unit that is buried just below ground level. A 3-inch hand auger would be used to make a hole for the geophone. Batteries will be changed out every 3 to 4 weeks and would be accessed by foot or using existing roads. Batteries are recharged at BEEF location. Recorders will be changed out when memory is almost full. A map has been provided of the proposed sensor locations.

Note: This project coincides with U1a Surface Operations (NEPA Checklist NV 2019-017).

---

Categorical Exclusion(s) Applied:

10 CFR 1021 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: December 9, 2019