



Department of Energy  
National Nuclear Security Administration  
Categorical Exclusion Determination Form



**Categorical Exclusion ID#:** NV-2019-011 Rev 2

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**Proposed Action Title:** Ecological and Environmental Monitoring Field Activities

**Program or Field Office:** Nevada Field Office

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

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**Proposed Action Description**

At the Nevada National Security Site (NNSS), ecosystems are monitored to ensure compliance with laws and regulations pertaining to protecting biota and wetlands. Information is gathered and used to predict, evaluate, and mitigate potential impacts of proposed projects on the ecosystems. Other activities may be related to providing support for cleanup of sites or conducting land reclamation/restoration projects, including short-term soil stabilization, revegetation, herbicide/pesticide use, and ecological monitoring. A Geographic Information System database of ecological data is maintained.

Monitoring may also include routine effluent monitoring and environmental surveillance for radionuclides in air, water (surface and groundwater), vadose zone, soil, plants, and animals to determine if activities at the NNSS are affecting the environment or offsite public. Animal studies would also be conducted to provide knowledge of current activity on- and off-site, prey demography, and habitat use.

Radio tracking of large animals such as bighorn sheep, mountain lions, mule deer, and antelope would take place and would include ground-based captures (e.g., air cannon, snare, clover trap), aerial surveys, aerial captures (i.e., net gun), and installation of motion-triggered cameras at various locations. Aerial operations would be low-level (below 500 feet above ground level) and in most cases would originate and terminate each day from an off-NNSS location. Arrangements would be made in advance if the use of Desert Rock Airport or Yucca Mountain Helipad was required. The study would also include GPS [global positioning system] collaring and the collection of genetic samples and radiological analyses to determine if animals on the NNSS are up-taking radionuclides and transporting them off site. Bighorn sheep radio-collaring would be accomplished by use of a net-gun deployed from a helicopter. After the net is deployed, the helicopter would land briefly in an open area to drop off two animal handlers who stabilize the animal, collect samples, and affix a collar. Damage to the environment from helicopters landing to process sheep is expected to be minimal, if any.

Historic and new ecological study plots would be established and sampled to study a variety of ecosystem processes (e.g., impacts of climate change, disturbance effects, drought, radiation effects, etc.). This would entail using a trencher for installing fences around plots, using a rototiller or other equipment to simulate disturbance, and erecting rainout shelters to simulate drought. A variety of sampling techniques and instruments would be used to measure vegetation and soil parameters (e.g., soil moisture and nutrient probes, portable gas exchange system, leaf chemistry machine). A



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meteorological station powered by a solar panel and small battery would be used for climatic data collection. Photos would be taken to document site conditions over time.

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**Categorical Exclusion(s) Applied**

B-3.3 Research related to conservation to fish, wildlife, and cultural resources

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**Regulatory Requirements in 10 CFR 1021**

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.

**To find that a proposal is categorically excluded, DOE shall determine the following:**

- (1) The proposal fits within a class of actions listed in Appendix A or B to 10 CFR Part 1021, Subpart D;
- (2) There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal; and
- (3) The proposal has not been segmented to meet the definition of a categorical exclusion. The 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 classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, include the following conditions as integral elements of the classes of actions. To fit within the classes of actions in 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 of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

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**NEPA Compliance Officer Determination**

Based on my review of information conveyed to me and in my possession concerning the proposed action, as NEPA Compliance Officer (as authorized under NNSA NAP 451.1 and DOE P 451.1), I have determined that the proposed action fits within the specified class(es) of action and I have reviewed the



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proposal for integral elements. I have determined that there are no extraordinary circumstances present and that the proposal has not been segmented to meet the definition of a categorical exclusion. Therefore, the application of a categorical exclusion is appropriate.

NEPA Compliance Officer: Carrie Stewart

Date Determined: November 8, 2021