



# National Nuclear Security Administration Categorical Exclusion Determination Form



NEPA ID#: HEDLP 15-001-001

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Proposed Action Title: Nuclear Accident Dosimetry (NAD) Laboratory (NV-2017-53)

Program or Field Office: Nevada Field Office

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

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Proposed Action Description:

The Lawrence Livermore National Laboratory (LLNL) Nuclear Accident Dosimetry (NAD) Laboratory is located in Area 23, Building 703 at the Nevada National Security Site (NNSS). The NAD Laboratory is used to measure activated materials that have been exposed to a critical burst of radiation from the National Criticality Experiments Research Center (NCERC) critical machines as part of NAD experimental exercises. The activated materials consist of various foils, powders, and liquids. These materials are components in dosimetry systems that rely on activation analysis as a method of calculating yield and dose of criticality accidents (simulated by the critical machines in NCERC).

The dosimetry systems are transported from the Device Assembly Facility to the NAD Laboratory where they would be separated into the individual components for measurement or further processing. Hoods are used to further process activated material before measurement. The processing of material includes possible melting or burning of powders (likely sulfur compounds). Measurement would occur using both electronically and nitrogen cooled gamma radionuclide identifiers as well as beta counting systems.

The NAD Laboratory operates under the auspices of LLNL but many other dosimetry teams may participate in the NAD exercises and utilize the facility, including other National Laboratories, Foreign Nationals, and commercial nuclear facility personnel. All activities associated with this project would be unclassified.

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Categorical Exclusion(s) Applied:

10 CFR 1021: B3.6 Small-scale research and development, laboratory operations, and pilot projects

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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: July 13, 2017