



Department of Energy
National Nuclear Security Administration
Categorical Exclusion Determination Form



Categorical Exclusion ID#: NV-2023-012 REV 1

Proposed Action Title: Los Alamos Operations (LAO)

Program or Field Office: Nevada Field Office

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

Proposed Action Description

The Nevada National Security Site (NNS) Management and Operating (M&O) Contractor's Los Alamos Operations (LAO) occupy a single, three-story building located at 2900 East Road (formerly 182 East Gate Drive) approximately 5 miles northeast of the Los Alamos National Laboratory site in Los Alamos, New Mexico. The building has a gross area of 50,492 square feet (ft²), with 41,489 ft² of useable space (about two-thirds for offices and one-third for laboratories). It is a leased facility that has been operated in the same manner since 1986.

LAO is an applied-science and engineering organization engaged in research, analysis, testing, and field operations for the Los Alamos National Laboratory, NNS, and other national labs.

The following activities take place at the LAO in support of the National Nuclear Security Administration Stockpile Stewardship mission:

- Design, fabrication, and testing of sophisticated ultra-fast electro-optic imaging systems and recording systems for fast-transient signals;
- Field support for experiments;
- Analysis of data and support capabilities such as custom software and hardware development, equipment characterization, graphics, document publishing, report production, and design/drafting services;
- Operation of the x-ray laboratories containing radiation-generating devices* (RGDs), providing a range of x-ray energies for characterization of detectors and testing equipment performance.
 - The pulsed x-ray machine (room L17) is a linear accelerator that has two modes of operation: low energy and high energy. The maximum beam energy in either mode is 2.5 MeV and the maximum average beam power is 15 Watts. This



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accelerator is designed to produce very short pulses for applications such as instrument characterization.

- The machine is controlled remotely from the control room (L16) by an authorized RGD operator. Personnel are not allowed in the vicinity of the machine during operation. Only authorized RGD operators may operate the pulsed x-ray machine.
 - The pulsed x-ray machine has 2 Beryllium windows that allow detectors to take very low energy readings if needed. Radiological Work Permits are not required for RGDs at LAO.
- Operation of the laser (electronic) laboratories that use Class 3B and 4 lasers that are interlocked and only have solid state lasers that are used in the development and testing of new diagnostic instrumentation and holography;
 - Conducting activities using high-voltage equipment;
 - Building and testing fiber-optic cables; and
 - Cleaning electronic components using very small quantities of chemicals such as ethyl alcohol, and use of epoxies for building fiber-optic cables.

* RGDs operate below the level that would require a radiological work permit.

Categorical Exclusion(s) Applied

10 CFR 1021: Appendix B, B3.6 Small-scale research and development, laboratory operations, and pilot projects; B3.10 Particle accelerators

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



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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.

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 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: Patricia Gallo

Date Determined: March 6, 2025