

COMMENT LETTER ON THE SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (SEIS) FOR ENHANCED PLUTONIUM UTILIZATION AT LAWRENCE LIVERMORE NATIONAL LABORATORY

By email to: LLNLSEIS@nnsa.doe.gov

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This is a comment on the National Nuclear Security Administration's (NNSA) Supplemental Environmental Impact Statement (SEIS) for Enhanced Plutonium Utilization at Lawrence Livermore National Laboratory (Livermore Lab).

1. **Improving Public Involvement in the Draft SEIS public Comment Process.** In order to improve both the volume and depth of public involvement on the Draft SEIS, the public comment period should be extended to at least 90 days, and preferably 120 days. This expanded period should also allow for multiple public hearings on the Draft SEIS, including an in-person hearing in Livermore for community members who do not have access to technology or prefer an in-person option. In order to accommodate community members who prefer Spanish, the Draft SEIS should include at least a Spanish translation of the Summary.
2. **Alternatives Analysis.** The "No Action" alternative should include a detailed explanation of the extent of the plutonium activities that can occur while maintaining Security Category III and staying within the current Administrative Level of plutonium.

An additional potential alternative should be analyzed that explores expanding the use of Livermore Lab's supercomputing technology and/or other technologies to fulfill the agency need without using plutonium or other special nuclear material, or alternatively use less-dangerous surrogate materials or smaller quantities of plutonium than what is contemplated by the proposed alternative.

The Proposed Action Alternative should specify the proposed administrative limit for plutonium and any other Special Nuclear Material allowed under the new security category and specify whether (and the process by which) that limit could be raised without further altering the security category.

3. **Upcoming Programmatic Environmental Impact Statement on Plutonium Pit Production.** The NNSA is required by settlement agreement in a lawsuit filed in the Federal District Court of South Carolina, to prepare and conclude a Programmatic Environmental Impact Statement (PEIS) for *Expanded Plutonium Pit Production* over the next 2.5 years. The PEIS will take a complex wide look at Plutonium Pit Production and provide the opportunity to examine alternatives, including utilizing alternative sites to potentially minimize the impacts of pit production, etc.

Livermore Lab is already deeply involved in supporting Expanded Plutonium Pit Production: 1) It is designing two new warheads that will require the manufacturing of new plutonium pits, the W87-1 and the W93; 2) It requested \$82.85 million this fiscal year for "Enterprise Pit Production Support" work. It is clear from the NOI that the "Enhanced Plutonium Utilization" is in some large part driven by Livermore's Plutonium Pit work which is directly connected to the national "Expanded Plutonium Pit Production" plan.

The NOI explains that the "Enhanced Plutonium Utilization" will not actually commence for 5 years. So why is this SEIS NEPA review being conducted separately and before the PEIS? Shouldn't this plan be part of the Programmatic EIS for Expanded Pit Production, or at least shouldn't that PEIS be conducted before this site specific SEIS? If not, the SEIS should clearly state why it is not part of the PEIS and clarify the percentage of new plutonium coming to LLNL under the Proposed Alternative for pit production related programs. This would include whether full plutonium pits or hemishells (half-pits) are planned to be shipped to Livermore Lab and in what approximate quantities.

4. **Plutonium-Contaminated Waste.** The proposed alternative in the PEIS should analyze the associated increase in the generation of radioactive/plutonium contaminated waste at LLNL and the capacity of its Waste Treatment Facility to store, handle, treat, and ship that waste safely. The accident-scenario analysis performed on the waste treatment facility area in the Site-Wide Environmental Impact Statement should be re-done to take into account the increase in radioactive waste resulting from the proposed alternative. This should include an analysis of the environmental impacts at the interim and permanent off-site waste receivers, including assurances that the Waste Isolation Pilot Plant in New Mexico can handle the increase in programmatic radioactive waste from Livermore.
5. **Impact to workers.** To date, 3,113 former LLNL employees have filed claims for federal medical benefits and compensation due to illnesses caused or contributed to by exposure to radiation and toxic chemicals on the job. The Draft SEIS should include the potential impacts to health of workers in the Plutonium Facility and the Waste Treatment Facility from Enhanced Plutonium Utilization, as well as the potential for exposure to unprotected nearby employees in the case of an accident, release, spill or intentional destructive act.
6. **Transportation of Plutonium.** The SEIS should disclose the anticipated number and frequency of plutonium shipments into the Lab and the associated increase in radioactive waste shipments out of the Lab. Additionally, it should analyze ways to mitigate the danger of transporting plutonium in and out of Livermore Lab for the Enhanced Plutonium Utilization Plan. The transportation route for plutonium coming to the Lab should be specified, but according to the DOE's Office of Secure Transportation's approved routes, it is likely to include the infamously dangerous I-580 Altamont Pass. A frequent site of high speed accidents, the congested Altamont pass has over 160,000 trips per day taking place, many of which are large semi-trucks. The SEIS should study ways to minimize the number of shipments that go in and out of the Livermore Lab, scheduling the shipments so that trucks are using the road at times of lower congestion, such as later in the evening, very early in the morning or on weekends.
7. **Superfund cleanup.** Livermore Lab has been listed on the US EPA's National Priorities List of most contaminated sites in the country since 1990. Cleanup of contaminated soil and groundwater, including an off-site groundwater plume, has already taken decades and will take many more under current funding levels. Plutonium was found in nearby Big Trees Park in the 1990's. The Draft SEIS needs to analyze how the new quantities of plutonium will not be released into the environment by using the best available technologies to prevent accidents, criticalities, fires, spills, releases, and intentionally destructive acts.
8. **Analyze impact to sensitive populations.** The SEIS should include the agency's current understanding of the health impacts of exposure to ionizing radiation, including but not limited to the dose response curve generally, and specifically how it may differ between females and males and by age and other factors.¹

Additional Comments:

Name:

Address:

¹ In 2024, the United Nations Institute for Disarmament Research (UNIDIR) published an important new report by Nichols and Olson, "Gender and Ionizing Radiation: Towards a New Research Agenda Addressing Disproportionate Harm" that found increased harm to women & girls: <https://unidir.org/publication/gender-and-ionizing-radiation-towards-a-new-research-agenda-addressing-disproportionate-harm/> The report, ""found disproportionate harm to females compared to males in a much wider sampling of radiation research literature than had previously been reviewed, which strengthens the finding that women and children are more radiosensitive."