

# Tri-Valley CAREs

Communities Against a Radioactive Environment

---

4049 First St., Suite 243, Livermore, CA 94551 • (925) 443-7148 • [www.trivalleycares.org](http://www.trivalleycares.org)



*Peace Justice Environment  
since 1983*

March 3, 2025

Submitted via email to: [LLNLSEIS@nnsa.doe.gov](mailto:LLNLSEIS@nnsa.doe.gov)

To: Mr. Alan Chen, NEPA Document Manager

National Nuclear Security Administration, Livermore Field Office

**Re: Tri-Valley CAREs Comment on the Supplemental Environmental Impact Statement for Enhanced Plutonium Utilization at Lawrence Livermore National Laboratory**

---

Tri-Valley Communities Against a Radioactive Environment (CAREs) is a non-profit organization founded in 1983 by Livermore, California area residents to research and conduct public education and advocacy regarding the potential environmental, health, and proliferation impacts of the Department of Energy's (DOE) Lawrence Livermore National Laboratory (LLNL or Livermore Lab). On behalf of our 5,600 members, Tri-Valley CAREs submits the following comments on the scope of the National Nuclear Security Administration's (NNSA) Supplemental Environmental Impact Statement (SEIS) for Enhanced Plutonium Utilization at Lawrence Livermore National Laboratory.

Pursuant to the National Environmental Policy Act, the purpose of scoping is: "*early identification of concerns, potential impacts, relevant effects of past actions and possible alternative actions.*" Therefore, we ask that the analyses we are requesting be fully undertaken – and our questions fully answered – in the Draft SEIS.

1. **Improving Public Involvement in the Draft SEIS Public Comment Process.** In order to improve both the volume and depth of public involvement in the Draft SEIS, the public comment period should be extended to at least 90 days, preferably 120 days. This extended 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. Spanish and Tagalog translation should be available at this hearing.
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 limit of plutonium.

An additional alternative should analyze expanding the use of Livermore Lab's supercomputing technology and/or other technologies to fulfill the agency's proposed purpose and need without using plutonium or other special nuclear material. Alternatively, this analysis should also consider a scenario where less-dangerous surrogate materials or isotopes, and/or smaller quantities of plutonium are used 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. It should also specify whether, and by what process, 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 a settlement agreement in a lawsuit filed in the Federal District Court of South Carolina (in which Tri-Valley CAREs was one of the plaintiff groups) to prepare and conclude a Programmatic Environmental Impact Statement (PEIS) for *Expanded Plutonium Pit Production* over the

next 2.5 years. The PEIS will provide a complex-wide assessment of Plutonium Pit Production and provide an 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 in two key ways:

1. It is designing two new nuclear warheads—the W87-1 and the W93—both of which require new plutonium pits be manufactured.
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 large part driven by Livermore’s Plutonium Pit work which is directly connected to the national “Expanded Plutonium Pit Production” plan.

The NOI states that the “Enhanced Plutonium Utilization” will not actually commence for five years. Can the Draft SEIS explain why its review is 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 should include whether full plutonium pits or hemishells (half-pits) are planned for shipment to Livermore Lab and in what approximate quantities.

If the agency decides to go forward with this Draft SEIS and the PEIS in tandem, the Draft SEIS should explain the relationship between the two documents with respect to the proposed project. It is our position that a Record of Decision (ROD) on the PEIS should precede a ROD on this SEIS. The Draft SEIS should outline the procedural timeline in relation to the PEIS on Pit Production in terms of the expected timing of the Draft EISs, Final EISs and expected RODs.

4. **Plutonium-Contaminated Waste & Accident Scenario.** 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 updated to account for any potential 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. Can the Draft SEIS include the potential health impacts on workers in the Plutonium Facility and the Waste Treatment Facility from Enhanced Plutonium Utilization, as well as the potential for exposure of unprotected nearby employees in the event of an accident, release, spill, or intentional destructive act? Can it also analyze how this expansion specifically endangers the custodial and security staff at LLNL — including those in contracted roles?
6. **Public Health Harms.** The Draft SEIS should analyze the full range of associated public health harms of transporting, working with, storing, handling, and disposing of increased levels of plutonium at LLNL—including both short-term effects and those occurring over the relevant half-life of the plutonium isotopes in use. This analysis should include the health hazards and risks of plutonium across all the geographical locations impacted by transporting and handling plutonium, i.e., within and beyond LLNL, and spanning the complete lifecycle of the material.
7. **Transportation Risks and Air Impacts.** 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 dangers 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. However, 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 sees over 160,000 trips per day, many involving large semi-trucks. Can the SEIS study ways to minimize the number of shipments going in and out of Livermore Lab, including scheduling shipments during times of lower congestion, such as later in the evening, very early in the morning, or on weekends?

8. Additionally, Livermore Valley is currently a non-attainment air basin and has exceeded both state and federal air quality standards for years. Livermore had 56 **spare the air days** in 2020. Can the Draft SEIS detail the current air particulate matter ---PM10 and PM2.5 emissions by Livermore Lab and associated with its traffic (including employee commutes and truck traffic)? Can the Draft SEIS then compare how air emissions of particulate matter could be increased by the proposed alternative in a non-attainment air basin? Can the Draft SEIS specify how much the proposed alternative increase in air particulate matter emissions would result from the additional shipments of plutonium into the facility, the increase in waste shipments out of the facility and the idling of trucks during loading and unloading for both operations as result of the proposed alternative?
9. **Superfund cleanup.** Livermore Lab has been listed on the U.S. EPA's National Priorities List of the 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 1990s. Can the Draft SEIS analyze how the new quantities of plutonium will be prevented from being released into the environment? Can it describe the best available technologies to prevent accidents, criticalities, fires, spills, releases, and intentionally destructive acts? Can it also detail whether LLNL will be using those practices and/or technologies and provide an explanation if it is not? For context, can the Draft SEIS detail the current Main Site Superfund cleanup schedule for when all of the existing contamination both on and off-site will be cleaned up?
10. **Health Harms of Exposure to Ionizing Radiation.** Plutonium is a radioactive material. Can the Draft SEIS assess the potential for public health harms from increased utilization of plutonium at LLNL and include the NNSA's assumptions regarding the relationship between exposure to ionizing radiation and health outcomes when doing so? Additionally, can it specify the health outcomes of exposure to ionizing radiation will be considered and justify its methodology using the most protective public health models? Can it explain what groups will NNSA consider more vulnerable to exposure, (e.g. by gender, age, etc.) and how will these increased sensitivities be accounted for?
11. **Environmental Justice (EJ).** EJ principles, rooted in federal directives such as Executive Order 12898, require agencies like the National Nuclear Security Administration (NNSA) to prioritize equitable protections for marginalized communities, including low-income populations and people of color. Environmental justice principles mandate that agencies like the NNSA:
  1. Avoid disproportionate impacts on marginalized communities, including low-income populations and people of color.
  2. Ensure meaningful participation in decision-making, including accessible public engagement.
  3. Provide transparent, culturally appropriate information (e.g., translated materials).
  4. Address cumulative impacts of pollution and historical harms.
  5. Prioritize health equity and remediation of legacy contamination.

EO 12898 mentions that agencies must assess and mitigate disproportionate burdens on vulnerable communities. Census Tract 6001451506, directly adjacent to LLNL, has a poverty rate exceeding 50%

— nearly four times the state average. Over 60% of its residents are people of color, and many live in Section 8 housing at East Avenue apartments, just 1.2 miles from the Plutonium Facility. These communities have been systematically excluded from decision-making, as seen in NNSA’s failure to provide translated materials or in-person hearings for limited-English households, who make up 23% of Livermore’s population. Can the Draft SEIS provide an analysis of how radiation, accidents, or pollution will disproportionately harm this community?

Meaningful engagement requires accessible processes such as multilingual materials and in-person hearings. The NNSA violates this requirement by providing statutorily minimum comment periods to its highly complex documents. Plus, the lack of translation of its materials and hosting only virtual meetings without interpreters or translators is procedural injustice. Our farmworkers, seniors, and single parents—many Spanish or Tagalog speakers—deserve to be included fully in this process that affects them. Thus, can the Draft SEIS be translated into Spanish and Tagalog and the associated public hearings provide Spanish and Tagalog translation? The upcoming draft must address these gaps, and the final document must reflect equitable engagement.

Withholding information is another violation of EO 12898. Transparency is key to informed participation and foundational to justice. The brief NOI does not contain LLNL’s history of plutonium accidents, worker exposures, and contamination. Communities cannot assess dangers without this context. Can the Draft SEIS document all of LLNL’s radiation releases into the environment? Can the Draft SEIS include a detailed inventory of past plutonium accidents, spills, fires, and near-misses, with data on impacted workers?

EO 12898 also states that agencies must evaluate combined risks from pollution, climate disasters, and historical inequities. Keeping this in mind, can the SEIS analyze cumulative air pollution from the Vasco Road industrial corridor or Livermore Airport, which already burden the tract?

Has LLNL adopted EJ criteria to map all Section 8 housing and limited-English households nearby? If not, can it do so as part of this Draft SEIS? Can the Draft SEIS analyze conducting independent health monitoring for Census Tract 6001451506?

**12. Hydrology, Water Quality and Sewage.** In order to establish the baseline of existing surface and alluvial water quality, can the Draft SEIS provide data from any on-site water testing (Including of Arroyo Seco, groundwater and surface water in Lake Haussmann) that have been conducted by LLNL, Zone 7 or an independent party to determine increases or decreases in water quality? If there is no data from the last 3 years, can LLNL conduct that testing (preferably by contracting with an independent party)? Can the Draft SEIS also include data from LLNL’s groundwater monitoring wells both on and off site? Can the Draft SEIS detail where waste water from the Plutonium Facility is treated, how it is tested, and where it eventually drains to? Can the Draft SEIS include a description of the historical Plutonium contaminated sludge problem with sewage from Lab going to the City of Livermore sewage treatment facility, how it was remedied, and how any similar contamination would be avoided by the preferred action alternative?

**13. Seismic Analysis.** LLNL is close to many major fault lines including the San Andreas Fault, the Hayward Fault, the Greenville Fault, the Las Positas Fault, the Pleasanton Fault and the Calaveras Fault. The United States Geological Survey has found that areas within the LLNL footprint are susceptible to seismic-related ground failure, including liquefaction, lateral spreading or collapse. Can the Draft SEIS identify (with a map) and analyze areas within the entire LLNL footprint and that are susceptible to ground failure, including liquefaction, lateral spreading or collapse, landslides, including rotational slides, translational slides and debris flows? Can the Draft SEIS identify soils within the LLNL footprint that are susceptible to mobilization? Can the Draft SEIS detail whether the Documented Safety Analysis

and/or Structures, Systems, and Components for the Plutonium Facility have been updated to take the most recent USGS analysis of seismic risk for the area into account? Can the Draft SEIS analyze how a rupture along any of the nearby faults that could impact the Plutonium Facility at LLNL and the safety of nuclear materials, nuclear activities, workers in the Plutonium Facility and offsite population as conceived by the proposed alternative?

Tri-Valley CAREs appreciates the opportunity to comment on this scoping process and hopes that the Draft SEIS reflects these comments and responds to the questions asked therein.

Sincerely,

Scott Yundt  
Executive Director

Marylia Kelley  
Senior Advisor

Anoushka Raj  
Environmental Program Manager

Raiza Marciscano- Bettis  
Bilingual Community Organizer