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Tri-Valley CAREs Comments and Questions on the Draft *Supplement Analysis to the 2005 Site-Wide Environmental Impact Statement for Continued Operation of Lawrence Livermore National Laboratory*

Tri-Valley CAREs submits these comments and questions on the Draft Supplement Analysis (SA) to the 2005 Site-Wide Environmental Impact Statement (SWEIS) for Continued Operation of Lawrence Livermore National Laboratory (LLNL). As explained herein, the SA fails to provide an accurate, complete or legally adequate analysis of the new and updated programs at Lawrence Livermore National Laboratory as is required by the National Environmental Policy Act (NEPA).

Tri-Valley CAREs was founded in 1983 in Livermore, California by concerned neighbors living around the Lawrence Livermore National Laboratory, one of two locations where all US nuclear weapons are designed. Tri-Valley CAREs monitors nuclear weapons and environmental clean-up activities throughout the US nuclear weapons complex, with a special focus on Livermore Lab and the surrounding communities.

1. General Concerns with the Draft Document's Compliance with the National Environmental Policy Act

The purpose of NEPA is to ensure that every federal agency prepare a full Environmental Impact Statement (EIS) for major federal actions significantly affecting the quality of the human environment.[1] An EIS must provide a "full and fair discussion of significant environmental impacts and shall inform the decision-makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment."[2]

When it is unclear whether or not an EIS supplement is required, DOE may prepare a Supplement Analysis.[3] The Supplement Analysis shall discuss the circumstances that are

[1] 42 U.S.C. 4332; 40 CFR 1501.
[2] 40 CFR 1502.1.
[3] 10 CFR 1021.314(c).

pertinent to deciding whether to prepare a Supplemental EIS, pursuant to 40 CFR 1502.9(c). The Supplement Analysis shall contain sufficient information for DOE to determine whether:

(i) An existing EIS should be supplemented;
(ii) A new EIS should be prepared; or
(iii) No further NEPA documentation is required.

Supplemental EISs are required when "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts."[4] Further, a SEIS is required if a new proposal "will have a significant impact on the environment in a manner not previously evaluated and considered."[5]

The SA identifies 23 proposed "New and Modified Projects," and concludes that four of these programs are premature, and that the remaining 19 programs do not pose a significant impact on the environment. Therefore, the SA asserts that no further review of any of these plans is required. However, the SA fails to analyze a number of proposals for programs, construction, and development at both LLNL main site and Site 300 where "significant new circumstances" relevant to environmental concerns is known and where environmental impacts associated with the programs will be significant "in a manner not previously evaluated and considered."

As a result, the SA's analysis is superficial and woefully incomplete. Several of the 19 programs analyzed in the SA are connected to actions that have not been analyzed in any NEPA review and therefore must be analyzed together with the proposed action. Other programs clearly have significant environmental impacts that must be studied in a full EIS. For example, the SA omits any environmental review of the Livermore Valley Open Campus (LVOC) as a proposal and instead states that appropriate environmental review and documentation would be performed at a later date. Yet, the SA concedes that the Applied Energy Simulation Center, the High-energy Density Science, and the "visitor/commons/collaboration center" are connected to the LVOC effort and purportedly studies these programs in this SA. Moreover, in the SA we learn that LLNL intends to increase airborne radiation emissions at the National Ignition Facility and increase nuclear waste production, activities that certainly will result in potentially significant environmental impacts. Ultimately, the SA fails to meet the standards set out under NEPA.

Questions:

- Why is LLNL/DOE averse to doing more in depth review of the potential impacts of these plans under the National Environmental Policy Act (NEPA)? Why would more NEPA review not aid in public understanding of these proposed activities? How might a full NEPA review, via a new SWEIS or a full Supplemental Environmental Impact Statement (EIS), enhance stakeholder participation, and even the quality of these projects?

- Is the DOE assuming that the standard for preparing a full SWEIS or a full Supplemental EIS document exists 1) only if the new and modified projects alone pose a significant impact on the environment, or 2) if the previous SWEIS activities plus the additional new and modified projects pose a significant impact on the environment?

[4] 40 C.F.R. § 1502.9(c)(1)(ii).
[5] *S. Trenton Residents Against 29 v. Fed. Highway Admin*. (1999) 176 F.3d 658, 663.

2. Segmentation

Connected actions are those actions that are "closely related" and "should be discussed" in the same NEPA document. Under NEPA, actions are connected if they:

> (i) Automatically trigger other actions which may require environmental impact statements.
>
> (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.[6]

The Ninth Circuit Court of Appeals applies an "independent utility" test to determine whether multiple actions are so connected as to mandate consideration in a single EIS. The crux of the test is whether "each of two projects would have taken place with or without the other and thus had `independent utility.'" *Wetlands Action Network v. U.S. Army Corps of Eng'rs, 222 F.3d 1105, 1118 (9th Cir.2000),* 222 F.3d at 1118. When one of the projects might reasonably have been completed without the existence of the other, the two projects have independent utility and are not "connected" for NEPA's purposes. *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 894 (9th Cir.2002).

In *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1215 (9th Cir.1998), the Ninth Circuit held that five potential logging projects in the same watershed were cumulative and had to be evaluated in a single EIS, where they were reasonably foreseeable and "developed as part of a comprehensive forest recovery strategy." Similarly, in *Thomas v. Peterson*, 753 F.2d 754, 758 (9th Cir.1985), the court held that a logging project and a road to facilitate the logging had to be considered in a single EIS because "the timber sales could not proceed without the road, and the road would not be built but for the contemplated timber sales."

The Target Fabrication Facility (TFF), the Tritium Facility Modernization Project (TFMP) and the LVOC proposals are reasonably foreseeable and interdependent with Projects that are purportedly analyzed in this Supplement. Therefore these programs are improperly segmented in violation of NEPA.

a. Target Fabrication Facility and National Ignition Facility Operations

The TFF is not currently analyzed in this SA. We are left to assume that it is one of the facilities that are excluded because it is "not yet being sufficiently defined for inclusion." However, the TFF has been in the works for a long time and has a clear definition of its purpose in the SA. Further, Tri-Valley CAREs has documents obtained under the Freedom of Information Act that show a long and sustained process delineating and defining the TFF. The TFF predates other projects that DOE has decided to incorporate in this SA. Moreover, the TFF is not less mature with regard to the Critical Decision path or line item budget detail than other projects chosen for inclusion in the SA. There is no clear line separating projects that were chosen for inclusion in this SA from the TFF, which was not included. The TFF would provide facilities for performing research on target fabrication activities, including materials, precision assembly and target characterization techniques," for the National Ignition Facility (NIF). Additionally, the TFF is referenced elsewhere in this SA document, despite purportedly being "not yet defined." The TFF would support planned operations at the NIF. Thus, the TFF is a

[6] CEQ Regulations (40 CFR §1508.25).

planned facility, sufficiently ripe for inclusion in the SA, and a project that cannot or will not proceed without the NIF, and therefore should be studied with the NIF in one NEPA document.

Questions:

- Was the TFF left out of this SA because its activities, which will likely result in substantial tritium emissions and other possible contaminants, increased the level of environmental impact to the extent that a more detailed NEPA review would be necessary? (Like a full new SWEIS or a full Supplemental EIS.)

- Is it proper to segment the TFF NEPA analysis when it supports modifications in NIF's operational parameters, including, potentially, ones being analyzed in this document?

b. Tritium Facility Modernization Project

The TFMP was not analyzed in this SA and should be. The Defense Nuclear Facilities Safety Board (DNFSB) has reported exposures and violations at the Tritium Facility Modernization Project in recent months. A "Modernization Project" was approved for the facility (B-331) after the Lab determined that the project was eligible for a "Categorical Exclusion" from NEPA review. (This project was not covered by the 2005 SWEIS). The DNFSB has also reported that some of the newly "modernized" areas of the Tritium Facility Modernization Project have not gone though the final readiness review. It appears that the completion schedule for the project has changed, and/or the scope of the project was expanded. Due to the recent exposures and violations at the facility, the hazards posed by the potential release of tritium and the potential release of plutonium (due to new activities with that element in B-331), and the fact that tritium contaminated water can not be remediated (for example), we believe that the Tritium Facility Modernization Project has the potential to cause a significant impact the human health and the environment and was improperly excluded from the NEPA process. Moreover, according to the June 20, 2006 memo from then LSO manager to Jerald Paul, NNSA Central Technical Authority, and other documents obtained by Tri-Valley CARES under the Freedom of Information Act, the Tritium Facility Modernization Project is irretrievably connected to the NIF. For example, the 2006 document states: "A project is underway to modify increment 2 by adding a large one-room structure and opening several internal walls to enable new tritium workstations for the purpose of preparing targets for the National Ignition Facility (NIF). The Tritium Facility Modernization Project (TFMP) is anticipating that an inventory limit of 20 to 30 grams of tritium will be required for NIF target preparations…" As noted above, the TFMP was not covered in the 2005 SWEIS, has evolved since that time and was also not covered in this SA either. It is certainly has become a major federal actions significantly affecting the quality of the human environment. Moreover, the new TFMP was designed to and has become connected to NIF in specific ways the pre-TFMP B-331 was not. NIF is given as the foremost mission reason for the TFMP, and must be analyzed with NIF in a comprehensive and thoroughgoing NEPA review.

Questions:

• What is the status of the TFMP's NEPA review? Is the Categorical Exclusion the NEPA document upon which the entire project still rests?

• Was the TFMP left out of the SA because it involves increased tritium emissions that individually or when coupled with other NIF-related increases in tritium emissions could lead to a finding that would support a decision to prepare a new SWEIS or Supplemental EIS?

• Is it proper to segment the TFMP from NIF (and ignore it altogether) when it directly supports NIF operations that are analyzed in the SA?

c. Livermore Valley Open Campus "initiative"

The Livermore Valley Open Campus (LVOC) initiative has been described by the Lab's own documents and press releases as a project with a specific purpose and need and description- "To leverage the ground-breaking research of the nuclear security labs through private-sector collaborations. The LVOC initiative is conceived as an 'enabler' that will provide expanded opportunities for research collaborations between Sandia/California, LLNL, and external partners. Anchored by Sandia's CRF on one side and LLNL's NIF on the other, the LVOC will consist of an approximately 50-acre parcel along the eastern edge of the LLNL and Sandia sites along Greenville Road." (*From the 11-09 Sandia CRF Newsletter)*

The LVOC initiative has been entirely conceived of since the 2005 SWEIS. Yet, there is not a coherent description or discussion of the LVOC initiative and its purpose and need in this document. However, on page 3-3, we learn that the LVOC will be "anchored" by Applied Energy Simulation Center (AESC) and High-Energy Density Science Center (HEDS) and later we also learn that the Visitor/Commons/Collaboration center will play an important part in the LVOC. The Eastside Access Control Modifications and the Northwest Corner Access control Modifications are also purposed with "allowing an increase in collaborative projects" which can be assumed to mean that they also support the LVOC vision, which includes moving the security fence lines. While it is understood that additional facilities that will be part of the LVOC are not yet proposed or understood, this SA shows significant amounts of the LVOC's foundation are coming together. These facilities are all LVOC connected actions.

The NEPA process must be integrated with agency planning "at the earliest possible time," 40 C.F.R. § 1501.2, and the purpose cannot be fully served if consideration of the cumulative effects of successive, interdependent steps is delayed until the first step has already been taken. *Thomas v. Peterson*, 753 F.2d 754, 760 (9th Cir. Idaho 1985) "While it is true that administrative agencies must be given considerable discretion in defining the scope of environmental impact statements, there are situations in which an agency is required to consider several related actions in a single EIS... Not to require this would permit dividing a project into multiple "actions," each of which individually has an insignificant environmental impact, but which collectively have a substantial impact. *Id*. at 758**.** *See also Alpine Lakes Protection Society v. Schlapfer*, 518 F.2d 1089, 1090 (9th Cir. 1975). NEPA requires descriptions of proposed actions to include connected actions that are currently proposed or will be proposed in the foreseeable future. The full extent of the proposed actions, including all components, segments, and future phases should be determined. As a rule, an agency can not divide a proposed action into smaller segments to avoid presentation of its full environmental effects. Rather, it must determine if activities are connected in such a way as to be considered parts of a single action, in which case they should be evaluated in the same EIS.

Questions:

- Isn't LVOC, when examined as a whole, a project that will involve significant impacts on the environment? Shouldn't it be analyzed in a new SWEIS?

- Alternatively, rather than a piecemeal and segmented approach, should the LVOC initiative be analyzed in its own NEPA review due to its size, scope and the significant impact on the environment it will pose when examined as a whole?

- Couldn't the new SWEIS or the LVOC EIS be tiered off of as additional specific buildings and components of the overall initiative are proposed?

- Wouldn't this kind of review enhance potential stakeholders' involvement in the initiative?

- Shouldn't this SWEIS or LVOC EIS include a clearly stated purpose and need that also provides for various alternatives to the LVOC, incorporates what specific impact this initiative will have on the Livermore community as a whole, the necessary clean up that must take place on the land, and the cumulative impacts of all of these proposed activities?

3. National Ignition Facility

NEPA requires that federal agencies analyze the environmental effects of proposed actions, publish the results of their study and receive and respond to public comments. These "action-forcing" requirements are intended to serve two broad goals. First, Congress intended that an agency, "in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts."[7] Second, the publication of the EIS informs the public of potential environmental impacts and "provides a springboard for public comment."[7]

Operational changes at NIF include increasing the maximum tritium inventory from .05 g to .8 grams (a 16 fold increase), an increase in the maximum per shot "blast" yield from 45 MJ to 120 MJ (over 2.5 times more blast yield), and increasing the maximum beryllium inventory from 20 grams to 1 kg, (a 50 fold increase). Additionally it is stated that "the NIF would establish administrative procedures to warn or exclude any non-involved workers within the potential 5-mrem isodose contour area," which will "move further from the NIF target bay" than what was calculated in the SWEIS based on the previous maximum per shot yield, due to "skyshine," which involves NIF- produced neutrons "scattering off the atmosphere to the public."

These changes will certainly have potentially significant environmental impacts that warrant further study pursuant to NEPA. DOE should analyze these changes to the NIF in a stand-alone EIS for the NIF so as to demonstrate to the public that the DOE has carefully considered detailed information concerning these significant environmental impacts and to create a "springboard for public comment."

Questions:

- Exactly how much of the laboratory will be included in the "potential 5-mrem isodose contour area"? Could the UC Davis Center be included? Could parts of the LVOC? Could the new visitor center? How many people are normally working in the 5-mrem isodose contour area? Will non-involved workers outside the potential 5-mrem isodose contour area be "warned or excluded," or will workers who may receive a 4.5-mrem dose have no opportunity to be excluded?

[7] Robertson v. Methow Valley Citizens Council (1989) 490 U.S. 332, 349.

- How will these "administrative procedures to warn or exclude any non-involved workers within the potential 5-mrem isodose contour area" be coordinated with other Lab programs? With security? Where will workers go? Will they be paid if they choose to go? How will it be determined that the 5-mrem isodose in the contour area has dispersed enough for individual workers to return to their stations, will each area be monitored?

- Why is it necessary to do these increased blasts in NIF? Will these blasts increase the likelihood of achieving ignition? Or, could these blasts enhance the nuclear weapons activities done at NIF, including weapons development and /or nuclear weapons effects testing?

4. The Biological Impacts Section

This SA reaches the conclusion that the endangered species at both the main site and Site 300 will not be impacted by the proposed activities. However, the lack of actually completed biological assessments makes the conclusion appear more wish than actuality. Both the main site and Site 300 are to have Programmatic Biological Assessments (PBAs) completed at some undisclosed future date.

The SA states that the main-site PBA will include a "Resource Management Plan," conservation measures and a conservation buffer. It goes on however to explain that the conservation buffer is in an already developed area where normal activities will continue, and in fact, the security fence relocation project will be taking place within the "buffer."

The SA states that the Site 300 PBA will include a "Conservation Set-Aside Area" (CSAA) to "mitigate project impacts" among other things. It states that the location of the CSAA was chosen to "encompass areas of abundant biological diversity that can be dedicated for the preservation of listed species," though also states that the potential for incidental takes could occur.

Questions:

- How is it that the SA can conclude that the proposed activities will not have an impact on the endangered species present at either site, (including those who have designated critical habitat at Site 300) without having completed the PBAs?

- If the main site PBA conservation buffer is in a developed area where normal activities will continue and in fact, the security fence relocation project will be taking place, which will surely involve land disturbing activities, how does the buffer actually conserve species?

- Can the CSAA at Site 300 be described? (Size? Location? Description of biological resources? Distance from operations?)

- Can more detailed maps of both the biological resources and the proposed conservation efforts be provided?

- When is it estimated that these PBAs will be complete?

- On page 3-8 the SA states that "a site-wide Biological Assessment (BA) for the LLNL SWEIS was prepared and submitted to the USFWS in April 2004. The USFWS did not issue a Biological Opinion (BO)." However, when asked about this in the public meeting about the SA, the DOE subject matter expert stated that Biological Opinions had always been issued. Please clear up the discrepancy between that statement and the written words in the SA.

5. Air Emissions

There is a projected increase in tritium emissions from the NIF from 30 Ci per year to 80 Ci per year. The reason given involves issues with the molecular sieve capture system at the NIF. Exposure to tritium has potentially significant human health impacts. This is at odds with this documents assertion that there will be no significant impact to human health or the environment, and this adds to and underscores, Tri-Valley CAREs call for preparation of a full SWEIS or at least a full Supplemental EIS. Moreover, as noted in the TFMP section, that project has planned increases in tritium emissions (since the 2005 SWEIS) related to the NIF that will be added to this particular increase from 30 to 80 Ci per year due to the limitations of operating the molecular sieve at NIF that was included in the SA. What about the combined impacts?

Questions:

- Are there alternatives to increasing airborne radiation? Other capture systems available? Changes in operational methods or parameters?

- Will the public be notified when there are increased airborne tritium emissions from the NIF?

- There is heightened concern about increased levels of baseline radiation in the environment from the Fukushima disaster. Did LLNL take these potential increases into consideration when calculating baseline doses? Should the local public be concerned about increase in radiation from LLNL in addition to that coming from the Fukushima disaster? From other LLNL activities? From other sources?

6. Beryllium

In November of 2010 the Department of Energy (DOE) Office of Health, Safety and Security (HSS) announced a $200,000 penalty issued to the managers of LLNL. This unprecedented action stems from the agency's finding that the Livermore Lab National Security, LLC's (LLNS) legally-required program to minimize worker exposure to beryllium was rife with "deficiencies" that led to multiple, uncontrolled worker exposures between 2007 and 2010, subsequent to the LLNS contract to manage the nuclear weapons laboratory.

Currently, the DOE is revising and updating its Chronic Beryllium Disease Prevention Program, which LLNL is required to implement.

Despite these developments, the SA proposes a huge increase in the use of beryllium for NIF experiments with minimal analysis of how this increased Beryllium will be managed or whether additional worker protections will be implemented. The SA also includes "Facility Beryllium Decontamination Efforts" on its "New and Modified Projects" list. While, decontaminating and removing legacy Beryllium from LLNL is a very important project, it does

pose potential hazards to workers, especially in light of previous exposures, and merits a detailed analysis.

The SA states that "for NIF Target Chamber cleanup options have been evaluated and the preferred option is to retain the first wall panels, which capture most of the particulate contamination, in place; as opposed to decontamination or replacement and disposal. This operational change would warrant changing the NIF maximum beryllium inventory from 20 g to 1 kg. The increase in the amount of beryllium inventory will allow the first wall panels to remain in place for an extended period of time, possibly for the lifetime of the facility; thereby, avoiding unnecessary worker exposure and an increase in waste generation that would occur if these panels needed to be removed sooner. Controls in the NIF workplace to manage beryllium include the establishment of beryllium work areas, use of negative ventilation, area draping, use of personnel protective equipment, and monitoring." Yet, the SA summary concludes that "The increase of beryllium inventory from 20 g to 1 kg would not warrant additional controls beyond those already in place in the NIF." The analysis that supports this finding states "A chemical accident involving 1 kg of beryllium from the NIF would have a consequence at the site boundary of 0.0051 mg/m^3 at 350 meters, or approximately 20% of its ERPG-2 value. This is well below the chemical accident described in the SWEIS, a chlorine gas release with an ERPG-2 distance of 1900 meters."

Questions:

- How can the SA conclude that the 50-fold increase in beryllium at NIF does not warrant additional controls to protect workers and the public? What about the nearby public at the LVOC? The visitor center? In the community?

- Shouldn't the analysis, which finds that an accident will have low concentrations at the site boundary, also analyze concentrations inside the site boundary to explain how NIF and other LLNL workers will be protected from the higher levels?

7. Radioactive, Mixed and Transuranic Wastes

The discussion of various categories of hazardous, radioactive, mixed and transuranic wastes is scattered throughout the document. Beginning on page 3-67, the SA notes that an increase in transuranic wastes (e.g., containing significant concentrations of plutonium) in Building 625 at the Livermore Lab main site. The chart suggests an increase from 4 drums in that building to 36, all containing 18 plutonium equivalent curies. However, the conclusion on page 3-71 states that "with the approval of this SA, the container loading limits for both Building 625 and Building 696R would be changed to 50 plutonium equivalent curies," an apparent 3-fold increase per container.

Additionally, page 3-55 notes that "routine" low-level radioactive waste generation at Livermore Lab is also expected to rise above the levels set out in the 2005 SWEIS. The SA states that the reason is "NIF and photon science and the weapons complex integration" activities. Other, temporary increases in mixed low-level radioactive waste (i.e. a hazardous waste substance inextricably linked to a radioactive waste) are projected on page 3-55 as are "non-routine" increases in low-level radioactive wastes.

Questions:

- Given that Livermore Lab was fined in 2005 for exposing its workers while packaging transuranic waste, isn't a more stringent environmental review in a new SWEIS or Supplemental EIS warranted?

- While the SA asserts that the increase in transuranic waste will not significantly affect the accident scenario (that LLNL modeled), could the problem be with the model? Could a different model show different results?

- The increase in "routine radioactive low-level wastes" is connected in part to weapons activities, including at the NIF. Shouldn't DOE and Livermore Lab disclose the alleged "purpose and need" for these increases. The SA contains a single sentence disclosing the sources of the increase, but does not analyze "why" the increases are proposed or discuss any alternative scenarios.

- The increase in "non-routine low-level wastes" is connected in part to decontamination activities in several buildings on site. While those activities may be laudable in principle, conducting them without adequate analysis can be extremely risky for the workers and the public living and working nearby. There is ample evidence that these activities can and have led to preventable exposures. Shouldn't this trigger a more comprehensive environmental review, such as a SWEIS or Supplemental EIS?

8. Accidents and Intentional Destructive Acts

DOE Office of NEPA Policy and Compliance issued Guidance on December 1, 2006 on the "Need to Consider Intentional Destructive Acts in NEPA Documents." This guidance states that accident scenarios may not fully encompass potential threats posed by intentional destructive acts…[and] each EIS and EA should explicitly consider whether the accident scenarios are truly bounding of intentional acts…each EIS and EA should contain a section demonstrating explicit consideration of sabotage and terrorism."

This SA finds that any intentional acts are bound within existing accident scenarios that were analyzed in the 2005 SWEIS and the Revised EA for the BSL-3. Thus, it contemplates that no intentional act would cause impacts greater that those accidents, despite the facts that large quantities of Special Nuclear Material are being packaged at LLNL and transported around and away from the facility, increased amounts of tritium and beryllium will be utilized at the main site, and there will be increased access to the facility in the intentionally less secure LVOC area.

Questions:

- How will the LVOC initiative, which implicitly and explicitly decreases security level in its facilities, affect the overall safety and security of the facility? (This change was not addressed in the Complex Transformation Supplemental Programmatic EIS or the 2005 SWEIS)

- Isn't it foreseeable that the threat and consequences of both accidents and/or intentional destructive acts will increase due to the expanded public/civilian presence and involvement at LVOC? Why is this not analyzed in either the Accident or Intentional Destructive Acts Analyses?

- For intentional destructive acts involving both biological and nuclear materials at LLNL, there have been classified analyses done (For the BSL-3 Facility- *LLNL's Biological Risk and Threat Assessment for Building 368 Biological Safety Laboratory Level 3* and for the LLNL's Nuclear Facilities, the Complex Transformation SPEIS contained a classified appendix) that examined the impacts to LLNL and the surrounding community of potential intentional acts. Yet, even these analyses of the **potential** impacts of the intentional destructive acts have remained classified. Can it be explained how the disclosure of the potential impacts of intentional destructive acts that were analyzed in these documents "could be exploited by terrorists or assist them in planning attacks?" How are members of the public supposed to analyze the security precautions, safety measures and potential threats of proposed activities without an understanding of the kind of impacts that could result from an intentional destructive act?

9. Deinventory of Special Nuclear Material

The 2005 Record of Decision that followed the SWEIS raised the inventory limit for plutonium at Livermore Lab. Despite this raised limit, much of the Category 1 and 2 Special Nuclear Material, including plutonium, stored at the lab has already been removed or is scheduled for removal by 2012. (In Tri-Valley CAREs comments to the 2005 SWEIS it expressed the need for removal of Category 1 and 2 Special Nuclear Material to have its own NEPA review.)

The decision to remove Category 1 and 2 Special Nuclear Material follows a series of failed security drills and other findings that questioned the safety of this material in such close proximity to the public. It is also purportedly being done to "shrink the footprint" of the high security area at the Lab.

However, the Lab is also receiving usable quantities of weapons grade plutonium from Los Alamos National Laboratory to conduct experiments with. Thus, it appears that the "deinventorying" will not actually leave the Lab with no plutonium, that the high security area around the plutonium facility will have to remain in place and that the risk to the public living, working and visiting the area around the Lab will remain. This is at odds with this documents assertion that there will be no significant impact to human health or the environment and this adds to the call for preparation of a full SWEIS or at least a full Supplemental EIS.

Questions:

- Where is the NEPA coverage of the transportation of Special Nuclear Material in an out of Livermore Lab for the "deinventorying" process and for the shipments of weapons grade plutonium from Los Alamos National Laboratory? If there is none, why was it not analyzed in the SA?

- What potential impacts on human health and the environment could result from the shipments of weapons grade plutonium from Los Alamos National Laboratory?

10. High Explosives Application Facility (HEAF) "Expansion"

The plan to expand LLNL's HEAF at the main site was made public by the 2008 Complex Transformation SPEIS in which it is mentioned that 8-10 acres disturbed on main LLNL site near the

HEAF occur for the "HEAF Annex." Its NEPA coverage in that document was far from sufficient given that it was a Programmatic review not intended to cover the detailed impacts of each facility across the complex. Subsequently, the 2010 Lawrence Livermore Laboratory 10-Year Site Plan mentions a HEAF "expansion" that will occur within the next 10 years. Yet, no NEPA coverage has been provided for this project in any detail, though steps have been taken that could allow the project to begin within the next 5 years. Because the facility works with high explosives, it poses potentially significant impacts to human health and the environment both from normal operations and from a potential accident. Thus, is should be analyzed in a full SWEIS or at least a full Supplemental EIS and/or at the very least covered in this Supplement Analysis.

Questions:

- How is the HEAF expansion outlined in the LLNL 2010 Ten Year Site Plan different from the HEAF Annex?
- Why has the proposed HEAF expansion project escaped the hard look it merits with a NEPA review?
- What are the potential human health and environmental impacts of the HEAF expansion?
- What is the potential timeline for the HEAF expansion?

11. Conclusion

First, the SA must be improved and new document should be re-circulated for public comment. As it currently stands, the document does not meet the mandates of NEPA. Second, there have been numerous and significant changes in programs and operations at LLNL since the 2005 SWEIS and its November 2005 Record of Decision were published. Tri-Valley CAREs asserts that a new SWEIS is required at this time, or at the very least a Supplemental EIS. We find ourselves somewhat mystified that DOE's conclusion is to conduct no further environmental review; not a SWEIS, not a Supplemental EIS. We strongly request that DOE reconsider that conclusion.

For Tri-Valley CAREs (via email)

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