

**To: Mr. Michael Wahlig, Document Manager  
DOE/NSA Livermore Site Office, L-293  
7000 East Avenue, Livermore, CA 94551-0808**

**My Comment on LLNL's Supplement Analysis to the 2005 SWEIS**

**Dear Mr. Wahlig,**

The Draft 2011 Supplement Analysis of the 2005 Final Site-wide Environmental Impact Statement (SWEIS) for Continued Operation of Lawrence Livermore National Laboratory, which evaluates 19 new or modified projects at LLNL and their potential impacts on the environment, summarily concluded that the impacts will be insignificant and that no further analysis was needed under the National Environmental Policy Act. Thus, if approved, the Livermore Lab will move forward with these projects without additional environmental analysis until 2015, or later. However, I believe that a number of the projects have the potential to significantly impact the environment. Additionally, other programs were left out of the Supplement Analysis that also have the potential to significantly impact the environment. Thus, in my opinion, a full Supplemental EIS, or a new Site-wide EIS is needed to analyze these impacts. The details of these and other issues are expanded on in the sections below.

**I. Increased Risks at the National Ignition Facility**

I am deeply concerned about the operational changes at NIF that include increasing the maximum radioactive tritium inventory from .05 g to .8 grams (a 16 fold increase) I also believe the planned in tritium air emissions from the NIF from 30 Ci per year to 80 Ci per year is significant, as are 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 original SWEIS based on the previous maximum per shot yield, due to "skyshine," which involves NIF- produced neutrons "scattering off the atmosphere to the public." All of these increases pose potentially significant threats of increased exposure to radiation and toxins to workers, the public and the environment and require additional NEPA analysis.

**II. Radioactive and Transuranic Waste**

The discussion of various categories of hazardous, radioactive, mixed and transuranic wastes is scattered throughout the document. Beginning on page 3-67, the Supplement Analysis notes that an increase in transuranic wastes (e.g., containing plutonium) in Building 625 at the Livermore Lab main site is planned. 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 Supplement Analysis, 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.

### **III. The Target Fabrication Facility is Inappropriately Left Out**

The Target Fabrication Facility (TFF) is not currently analyzed in this Supplement Analysis. It is assumed 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 stated in Table 1.1- 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. Additionally, TFF is mentioned elsewhere in this document, despite purportedly being “not yet defined.” Additionally, the TFF directly supports the modifications in NIFs operational parameters being analyzed in this document. Thus, it appears that the TFF is very much a planned facility, but is being left out for other reasons. A full analysis of the TFF, including an alternatives analysis should be included in a new SWEIS or a Supplemental EIS.

### **IV. The LVOC Initiative Should be Analyzed with Various Alternatives and Public Input**

The Livermore Valley Open Campus (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.

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.

Again, I ask that the additional environmental review into the impacts of these projects be completed and would like to remain informed about and included in the Lab’s decisions.

**My Name Is:** \_\_\_\_\_

**Street Address:** \_\_\_\_\_

**City/State/Zip:** \_\_\_\_\_