Please sign this letter on the back and mail it to EPA

To: Ms. Kathy Setian, Project Manager (SFD8-1)
US Environmental Protection Agency
Superfund, Federal Facilities Branch
75 Hawthorne Street, San Francisco, CA 94105

Dear Ms. Setian:

I ask you to consider the Community Acceptance Criteria listed below when you make decisions about the Superfund cleanup at the Livermore Lab's Site 300 high explosives testing range. I want the best and most complete cleanup that is technically possible. Workers, the public and the environment deserve no less than our best effort.

1. Complete the cleanup in a timely manner. Set a schedule for cleanup activities and adhere to it. The goal should be to complete cleanup of most pollutants within 10 years after the Dept. of Energy's (DOE) last scheduled Record of Decision, with up to 30 additional years for monitoring of residual contamination. As part of the plan, schedule milestones outlining total mass removal, and trends toward achievement of cleanup goals should be established and committed to by the DOE.

2. Cleanup levels should support multiple uses of Site 300, not just weapons work. First, residential development is beginning to take place near the site boundary. Any modeling assumptions should include the likelihood that large residential communities will rely on the regional aquifer for drinking water, thus speeding up groundwater movement. Second, according to DOE's 2007 budget request, the Department is considering the feasibility of closing out programmatic operations at Site 300 after 2011. In fact, there is zero "need" for testing nuclear weapons components at Site 300, and DOE ought to terminate those activities -- and sooner than 2011. Site 300's future land use assumptions should include mixed residential, recreational, ecological preserve and industrial land uses. Lax cleanup standards will result in residual contamination being left in soil and groundwater that will, in turn, restrict future land uses. Therefore, the most stringent standard should prevail.

3. Cleanup levels should be set to the strictest state and federal government levels. Tri-Valley CAREs believes that the strictest cleanup levels should be met in cleaning up the site. Federal and state Maximum Contaminant Levels for all groundwater (on-site and off-site) should be the "bottom line below which the cleanup will not fall." In many cases the technology exists (or can be developed) that will clean up contamination to "background" levels — that is to the level that existed in nature at the site before Livermore Lab took over in 1955 and began polluting it. In all cases where feasible, "background' levels should be achieved. Tri-Valley CAREs concurs with a strict interpretation of the California Regional Water Quality Control Board's non-degradation policy for groundwater. Migration of contaminants into pristine waters should be halted. At a minimum, the standard of 1 in 1 million excess cancer deaths should be adhered to, as well as meeting a hazard index of less than 1 (non-cancer health effects).

4. Remedies that actively destroy contaminants are best. In order of preference, Tri-Valley CAREs recommends the following types of cleanup measures: (a) remedies that destroy contaminants (i.e. by breaking them down into non hazardous constituents), such as ultraviolet light/hydrogen peroxide, permeable barriers, or biodegradation; (b) active remedies that safely treat or remove contaminants from the contaminated media; (c) monitored natural attenuation in so far as it relies on natural degradation (and not further dispersion of the pollution) within a reasonable time frame. What is called "risk and hazard management" (i.e., restrictions on land use, fencing, signs and institutional controls), while potentially useful for reducing short-term risks, is not valid as cleanup. In no case do we think that "point of use cleanup" (e.g., merely placing filters on off-site drinking water wells) is appropriate. In all cases, hydraulic control should be established to halt migration of contaminant plumes to pristine waters.

5. The tritium source and plume should be controlled. The tritium plume, nearly two miles long and growing, cannot be cleaned up in the traditional sense of the word, since it is not feasible to separate the radioactive hydrogen (tritium) component from the water. Therefore, Tri-Valley CAREs recommends the following: (a) isolation of the tritium contaminated wastes in the unlined dumps to prevent further and continuing contamination of the groundwater; (b) hydraulic control of the plume to prevent further migration; (c) aggressive monitoring to ensure no migration while the tritium decays (at a rate of 5.5% per year); and, (d) a stringent contingency plan in case one or more of these methods fail. As it currently stands, groundwater rises into the unlined waste dumps during heavy rainfall and picks up additional contamination. Isolation of the wastes may be accomplished by means of drains, capturing groundwater upstream from the pits before it is inundated, and,

where feasible, by removing the tritium-contaminated debris from the pits and storing it above ground in a monitored storage facility.

(over)

6. **All radioactive substances should be isolated from the environment.** In addition to radioactive tritium, there are also groundwater plumes containing uranium-238. The uranium in groundwater at Site 300 comes from bomb testing activities. The technology exists to separate uranium-238 from the groundwater. This should be done.

7. **The ecosystem should be protected.** Site 300 sits on 11 square miles of land about 30 miles east of San Francisco. It sits on a series of steep hills and canyons, covered by grasslands. Seven major plant communities occur at Site 300, including: coastal sage scrub, native grassland, introduced grassland, oak woodland and three types of wetland. 20 species of reptiles and amphibians, 70 species of birds, and 25 species of mammals also occur. Included may be special, rare and endangered species including the burrowing owl and the San Joaquin Kit Fox and the Large-flowered Fiddleneck. In order to protect the ecosystem, ecological risks should be no greater than those for humans (i.e., a Hazard Index of less than one for selected species, based on recent data). Moreover, every effort must be taken to ensure that the cleanup methods chosen do not inadvertently destroy unique habitat.

8. **Decisions should not rely on modeling alone.** The Site Wide Feasibility Study and other documents point out just how complex the hydrogeology of the site is, and how little it is understood. Given this, Tri-Valley CAREs believes that over-reliance on modeling to predict the fate and transport of contaminants is not a good idea. Computer modeling should be used as a tool only, and it should be continually updated by actual field testing.

9. **Additional site characterization is needed.** It is also apparent from the cleanup planning documents to date that additional characterization (e.g. of soil, groundwater, waste dumps, etc.) is necessary, and will have to be budgeted for many years to come.

10. **A contingency plan should be completed and publicly reviewed.** This is needed because there are many uncertainties in the cleanup, novel remediation technologies will be used in some areas of Site 300, and contingent actions should be part of the cleanup plan and thus incorporated into the Superfund site-wide Record of Decision (ROD).

11. **The public should be involved in decisions**. As it now stands, public involvement takes place through the Technical Assistance Grant with Tri-Valley CAREs and at public meetings and hearings. After the ROD is signed, there are no mandatory public hearings or workshops. Therefore, we would like a commitment from the Livermore Lab to find a mechanism for regularly keeping the public informed.

12. **Cleanup should be given funding priority over weapons development.** Cleanup at Site 300 should be given a priority over further bomb-creating enterprises, and adequate, stable, long-term funding should be assured in order that the job may be done right. The current allocation of approximately one percent of Livermore Lab's annual budget for cleanup at Site 300 is insufficient.

13. **Future activities should adhere to the "Precautionary Principle" to prevent harm.** Releases of radioactive and toxic pollutants to soil, air, groundwater and surface water from ongoing and/or future operations at Site 300 are not acceptable. Any activity on the site should follow the common sense "Precautionary Principle" to avoid potentially harmful releases. Tri-Valley CAREs is additionally alarmed at Livermore Lab's 2006 "expression of interest" to the Dept. of Homeland Security to construct an exotic biowarfare agent research center at Site 300 that could experiment with Ebola virus and other diseases for which there is no known cure.

Sincerely,

NAME _____

ADDRESS _____

CITY/ZIP _____