T r i – V a l l e y C A R E s

Communities **A**gainst a **R**adioactive **E**nvironment

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Subject: **Comments on the TFA-West Draft-Final Addendum to the Remedial Design Report for Treatment Facility A: Arroyo Seco Pipeline Extension**

Dear Phil and Pete:

Attached are the comments of Tri-Valley CAREs (TVC) that address the TFA-West Remedial Design. In the attached comments, we address some of the concerns that the community in the effected area has voiced, both to LLNL in its public meeting last October and to Tri-Valley CAREs both before the meeting and since.

Sincerely,

Marylia Kelley
Tri-Valley CAREs

Peter Strauss
PM Strauss and Assoc.

cc:
Kathy Setian US EPA
Jacinto Soto, DTSC
Agnes Farres, RWQCB
Claire Holtzapple, DOE
Scott Wilson, LLNL

Tri-Valley CAREs' Comments

1. Regarding Section 5.3, Field Sampling Plan (FSP) we note that the main purpose of this plan is to locate and verify previously unidentified underground utilities and to collect shallow soil samples. Soil boring will be collected approximately every 100 feet along the alignment, collected at depths between 2-3 feet.

   We remind you that excavation is in an area where levels of plutonium were found in soil above "background" and near an area where even higher concentrations of plutonium were found (Big Trees Park), albeit below the Preliminary Remediation Goal that would have mandated remediation. In this regard, we note that this area has been sampled three times during the 1990s, and all three times elevated levels of plutonium-239 were found in soil. The highest concentration found in Big Trees Park was 1.02 picocuries per gram. For reference, the number EPA used for global background is between .001 and .01 picocuries per gram. An LLNL-produced survey of plutonium in Livermore soils that occurred before these sampling episodes in the 1990s demonstrated a background level very near the lower end of the EPA global range, which is consistent with the area's annual rainfall, geographic locations of the world's test sites, etc.

   The community is very concerned that levels of plutonium above background were found along the Arroyo Seco drainage between LLNL and Big Trees Park, as well as in the park itself. For example, the 1998 soil sampling, which was not the sampling event that revealed the highest levels of plutonium in the area, did show two locations along the Arroyo Seco near Susan Lane where plutonium-239 concentrations were at .040 and .043 picocuries per gram, respectively. That particular sampling event also showed a level in Big Trees Park with plutonium-239 in soil at .774 picocuries per gram very near the surface. All three sampling episodes that were undertaken during the 1990s should be considered in creating the sampling plan and dust suppression plan for this 2011/2012 pipeline project.

   In light of the facts that (1) there is mainstream scientific and medical agreement there is no safe level of exposure, and (2) that the soils will of necessity be disturbed by pipeline construction along the Arroyo Seco area to the edge of Big Trees Park, Tri-Valley CAREs requests that this community concern become a major part of the sampling and analysis program. We note that the plan to date says an on-site lab will analyze for gross alpha and beta. We request that the sampling and analysis plan more thoroughly consider all depths that will be disturbed. The plan states samples will be collected from 2 to 3 feet. It seems from diagrams in Appendix A that depths will exceed 3ft. in some locations. If soils are collected to 2-3 feet and more and mixed before sampling, plutonium concentrations in the top several inches of soil (where it has been found before) will be masked by the volume of soil. We request that samples be stratified. We also request that samples that exhibit any above average radiation readings be further analyzed by more sophisticated means. And, we request a much more detailed discussion of the process, including sampling methodology, detection limits, the background level being used for comparison, sample reporting and transparency, go-no go decision points and limits, worker protection measures, community protection measures, etc. be included in the final plan. Further, the community needs (and regulators should have) an opportunity to comment on this plan in its more detailed form before it goes final. We note that the community cannot fully comment (positively or negatively) on items not in the document.

2. Regarding Contingency Planning (Section 4.4), add that if any soil boring is found to have radioactive material above background, emergency hotspot removal will take place.

   Regarding the Dust Control and Air Monitoring Plan, we request that the plan include radiation monitors. Further, the plan as currently written lack detail. At the last TAG meeting, LLNL staff stated that additional detail would be forthcoming after the contractor was hired. How will this be communicated to the regulators and the public and how can the public, in particular, offer comments before the plan is finalized?

3. As Tri-Valley CAREs has stated in previous comments, part of this project's design should include a more robust groundwater monitoring system that indicates if the contours of the plume have migrated/expanded during the time period all pumping was shut off. And, it will offer a more timely warning if the "leading edge" of the contamination is slowly migrating westward. A more robust monitoring system is also useful in determining when cleanup is achieved. Therefore, we request the addition of two or more new monitoring locations along the (posited) western plume boundary be included in the final remedial design.

   Again, thank you for the opportunity to comment on the project. As we noted in prior comments, Tri-Valley CAREs supports the overall concept of the TFA-West pipeline extension project. It is far superior to the prior proposal to dump the contaminated water in a sewer line to go to the city sewer plant and ultimately the Bay, untreated. However, additional detail needs to be included in the remedial design of the project – as well as improvements in the sampling plan, dust suppression planning and groundwater monitoring at the plume's leading edge.

--Marylia Kelley and Peter Strauss