

November 9, 2009

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By email and postal mail

Subject: Initial Comments on the Treatability Study Summary and Proposed Cleanup Alternatives for the TFA West Area

Dear Phil and Pete:

Attached are the comments on of Tri-Valley CAREs (TVC) that address the document for the Treatability Study and Proposed Cleanup Alternatives for the TFA West Area at LLNL.

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' Initial Comments
on the
Superfund Treatability Study Summary and
Proposed Cleanup Alternatives
for the
Treatment Facility A -West Off-site Area,
Lawrence Livermore National Laboratory Main Site**

1. This report raises the question of whether there is chromium contamination discovered or expected in the off-site groundwater plume emanating from the Lawrence Livermore National Laboratory (LLNL) Main Site, and, in particular its leading edge designated as the TFA-West area.

There is no mention of chromium in the Sections 1-3 of the report. Yet, REDUCING chromium is given as an advantage for several of the treatment options (Table 1) and as a potential disadvantage for In-situ Oxidation (due to mobilization of chromium). Also, in the description of one of the options that was not screened out (ex-situ GAC), an Ion Exchange System unit would also have to be installed.

This implies to us that chromium has become a chemical of concern (COC) for this area.

In this context, we note that if the option of extending the pipeline is chosen over the other options, contaminated groundwater from the TFA-West area would be pumped to the TFA Treatment Facility on-site at LLNL. Our records indicate that this on-site facility does not have an Ion Exchange Unit or other method for remediating chromium.

Since the report implies that chromium is a COC, then TFA, if chosen to remediate that groundwater, should be modified to include an Ion Exchange Unit.

Moreover, if the reports of chromium have changed over the years so that the Department of Energy and Lawrence Livermore National Laboratory now believe it is a COC in this area of the plume, then this modification may require an Explanation of Significant Difference to the Record of Decision.

Since the report is not clear on the issue, we are also not clear what the valence state of the chromium is, although we assume that it is hexavalent. If that is the case, we would like to emphasize that the Office of Environmental Health Hazard Assessment's (OEHHA) draft Public Health Goal (PHG) for hexavalent chromium of 0.06 parts per billion (ppb). This contaminant, although not new to remediation managers, has taken on increased importance in the last few years. OEHHA draws a clear conclusion of its toxicity (OEHHA 2009a):

The findings of available human, animal, genotoxic, and toxicokinetic studies all indicate that hexavalent chromium is a possible human carcinogen by the oral route. Given these observations and until more human and/or animals studies

become available, it is prudent to consider this hazard in the development of a proposed PHG.

2. Tri-Valley CAREs appreciates that LLNL has developed a number of alternatives for treatment of off-site groundwater plume in the TFA-West area. We appreciate that there will be a discussion of the TFA-West area at the November 12, 2009 Community Work Group meeting.
3. We believe that the community directly affected by implementation of any of these options also needs to be brought into the process. This community should include the neighbors of Big Trees Park and along Charlotte Way where the off-site plume is located, plus the wineries that draw irrigation water from this area as well as other interested members of the public.

Thank you for this opportunity to comment on the proposal as it presently stands to remediate this area. We are ready to help ensure that the cleanup is as effective and environmentally benign as possible in its execution, and that there is community input prior to final decision-making.

Marylia Kelley,
Executive Director
Tri-Valley CAREs