

January 21, 2008

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U.S. Department of Energy
Livermore Environmental Programs Division
Lawrence Livermore National Laboratory
P.O. Box 808, L-574
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Subject: Comments on the Draft Site-Wide Record of Decision for LLNL Site 300

Dear Claire:

Enclosed are Tri-Valley CAREs comments that address the Draft Site-Wide Record of Decision (ROD) for the Lawrence Livermore National Laboratory Site 300 Superfund cleanup. Our focus in these comments has been reviewing the adequacy of DOE's Response to Comments on its Proposed Plan and the agency's evaluation of community acceptance. We have organized our comments into the following categories: Public Outreach and Access to Information, Cleanup Standards, Land-Use Assumptions, Continuing Operations, Process-Related Issues, Remedial Action Objectives, Milestones, NEPA and CEQA, Remediation, and Specific Comments on the Proposed Plan and Draft ROD.

As you are aware, Tri-Valley CAREs solicited input from a broad community in Tracy and Livermore to define what constitutes "community acceptance", one of the nine criteria with which the lead agency is required under the National Contingency Plan (NCP) to evaluate proposed remedies. We have determined that, based on our review of the public comments and DOE's responses, the selected remedy is not acceptable to the community. Major deficiencies are the DOE's failure to apply the strictest cleanup standards, its continued opposition to cleaning up to residential or mixed-used standards, its continued operations at Site 300 that will add contaminants, and its opposition to controlling contaminant migration at the Pit 7 complex.

Thank you for this opportunity to comment on the draft ROD. This ROD, as you well know, is the legally binding, site-wide document that contains the cleanup remedy and thereby largely determines the adequacy of the cleanup. It is with this in mind that we ask you to not only consider but to incorporate our recommendations and comments.

Sincerely,

Marylia Kelley

Tri-Valley CAREs

Peter Strauss

PM Strauss & Associates

cc: Kathy Setian, US EPA

Jacinto Soto, DTSC

Susan Timm, CVRWQCB

Leslie Ferry, LLNL

Tri-Valley CAREs' Comments
on the
Draft Site-Wide Record of Decision
for the
Lawrence Livermore National Laboratory Site 300
Superfund Cleanup

1. Public Outreach and Access to Information.

DOE responded to our prior comment calling for a table delineating DOE's analysis of the remedy(ies) against the nine EPA evaluation criteria by stating that the previous analysis in the interim remedy are the same as those for this ROD. The general public cannot be asked to go back to a document issued in 2000; therefore we request that this analysis be incorporated into the Draft-Final ROD so that the public can have a meaningful opportunity to comment.

We also request that the Responsiveness Summary identify all items that have been altered from the Proposed Plan to the Draft ROD, particularly those that occurred as a result of public comment. If it is a simple statement that no changes have occurred as a result of public comment, please state it.

2. Cleanup Standards.

In our comments on the Proposed Plan, Tri-Valley CAREs (TVC) stated that the proposed cleanup standards were not satisfactory. This view has not been changed by DOE's responses in the ROD. Specifically, DOE had previously committed to clean up the groundwater to a level between background and levels that are set by EPA in the Safe Water Drinking Act (i.e., the maximum contaminant level or MCL), or the state MCL. Yet, with few exceptions, DOE has opted for groundwater cleanup standards that are MCLs. The DOE has stated that after it reaches MCLs, it will evaluate whether it can meet a more stringent cleanup level such as the state water quality numeric limits (WQNLs), formerly known as the water quality objectives.

Tri-Valley CAREs continues to believe that a more appropriate way to develop cleanup standards is set them at the most stringent level; either the WQNLs or background. If the more stringent standard cannot be met for technical reasons, then the ROD can be modified at a later date. We believe that this is the correct approach, rather than establishing the most lenient groundwater standard as the foundation for cleanup.

It is a fact that there is increasing residential growth in the Bay Area in general and the Central Valley around Tracy in particular. Combining this fact with the increasing strain on water resources throughout the state demands that the highest level of cleanup of all potential drinking water supplies be given the highest priority.

We are reminded of the public comment by Garth Foreman of Tracy (p.3-3), who asked “why isn’t [the goal] cleaning it up to ‘normal’ or back to where it was before” the DOE polluted the site? DOE’s response to his comment emphasizes that the cleanup standards are “protective” of human and ecological health, and that it would cost significantly more to clean up to background, “with no added level of protection.”

While DOE had analyzed the cost and time to achieve various levels of cleanup in the Site-Wide Remedial Evaluation Summary Report (SWRESR), as far as we know, it has not analyzed the risk reduction from the various levels. TVC believes that it is indisputable that cleaning up to more stringent levels would provide an added level of protection for future users and neighbors of the site. Note that the Preliminary Remediation Goals for tap water are generally more stringent than the MCLs, many of which were established years ago and have not been updated using the latest scientific information. If the issue is cost-effectiveness or benefit/cost, then this should clearly be stated.

Regarding the DOE response to TVC’s comment (2e), TVC continues to disagree with DOE regarding the interpretation of SWRCB Resolution 68-16 and the absolute need to control contaminant migration.

3. Land-Use Assumptions.

In its response to TVC’s comments calling for residential standards for cleanup, DOE states that if land-use of Site 300 ever changes, cleanup standards will be re-evaluated. The fact is that changes in land-use at Site 300 are already being contemplated by DOE.

We think that by setting the cleanup levels to industrial standards, the costs of returning the land to residential standards will bias the reevaluation, and may prohibit this land from ever being used productively. Once decisions are made to leave a contaminant in place, it is difficult to obtain needed funds to continue research on how the contaminant could be safely treated, or to go back and remove or treat the contaminant.

In sum, this means that a decision now to use industrial standards for cleanup may haunt us all in the future by limiting what would otherwise be viable options for the site. Further, it may prejudice the “remedy” chosen in the ROD.

It is wiser – and will be cheaper in the long run – to clean up to more stringent standards from the outset rather than “reevaluate” at a later date when cleanup facilities may have been taken out of service or torn down (or were not what would have been chosen in the first place) and equipment mothballed or sold.

4. Continuing Operations.

Unrelated to land-use assumptions, at present, there are continued operations at the site which will inevitably lead to some releases. We recognize that DOE has a better understanding of waste handling and environmental protection practices than it did when it led to the past releases that are being cleaned up under CERCLA. However, we believe that the programs that potentially lead to the release of additional contaminants (e.g., explosive testing) and the programs for containing those contaminants should be discussed in the ROD. It is not helpful to the public that DOE simply refers to other programs (see response to TVC’s

Loulena Miles # 1). Mr. Sarvey of Tracy also pointed out that an application to permit increased outdoor testing activities will, if obtained, disperse some of the very same contaminants that are being cleaned up under this ROD. His comment further emphasizes the need to address ongoing operations and controls in this ROD.

Note that from an environmental perspective, this holds true whether the detonations are conducted by DOE under an NNSA program or under a “work for others” program for the Department of Homeland Security and/or Department of Defense. The issue is not which agency supplied the money, it is the contaminant mix of hazardous materials present in the “shots”, particularly the detonations to be conducted on outdoor “firing tables” like Building 850 that are part of the Superfund cleanup in the ROD.

5. Process-Related Issues.

In response to comments about the change in Remedial Action Objectives (RAOs) in the SWRESR, DOE has agreed to re-evaluate cleanup standards once the MCLs are met, due to the lack of agreement between DOE and the regulatory agencies regarding “assumptions used for the technical and economic feasibility analysis”. This is a repetition of the compromise that led to the “interim” ROD in 2001.

We ask that the regulatory agencies and DOE agree on assumptions, because we are concerned that at the next iteration, there will be no institutional memory about why the analysis is being done or what was in dispute. While it appears that DOE remains somewhat open to raising the cleanup standards, we find (and herein argue again) that decisions regarding cleanup standards should be set at the strictest levels; only after it is shown that these standards cannot be met, should they be made less stringent.

We also request that the ROD include a brief description and Table identifying all changes that have been made to the “interim” remedy in this ROD.

6. Remedial Action Objectives.

The Remedial Action Objectives (RAOs) have been altered, without public input. The RAOs were modified from the Interim ROD to the SWRESR to the draft ROD.

For example, under Human Health Protection, an additional RAO was added in the SWRESR to state “Prevent human ingestion of groundwater containing contaminant concentrations (single carcinogen) above State and Federal MCLs and any more stringent WQNLs” (i.e., water quality numeric levels, which are the same as the old water quality objectives). The Draft-Final Amendment to the Interim ROD for the Pit 7 Complex also had these exact words.

Yet the Draft ROD states “Prevent human ingestion of groundwater containing contaminant concentrations (single carcinogen) above cleanup standards.” This change was not discussed in the Proposed Plan, nor was the change brought to the attention of the public during the public comment period.

Second, an RAO for environmental protection was changed. The Interim ROD stated: “Restore water quality, at a minimum, to protect beneficial uses within a

reasonable timeframe. Prevent migration of contaminants into pristine waters. This will apply to both individual and multiple constituents that have additive toxicology or carcinogenic effects.”

The RAO in the SWRESR reads, “Restore water quality, at a minimum, to WQNLs that are protective of beneficial uses within a reasonable timeframe and to prevent plume migration to the extent technically and economically feasible. Maintain existing water quality that complies with WQNLs. This will apply to both individual and multiple constituents that have additive toxicology or carcinogenic effects.”

The Draft ROD states: “Restore water quality to groundwater cleanup standards within a reasonable timeframe and to prevent migration to the extent technically and economically feasible. This will apply to both individual and multiple constituents that have additive toxicology or carcinogenic effects.”

Also, the Draft-Final Amendment to the Interim ROD for the Pit 7 Complex stated “Restore water quality, at a minimum, to water quality objectives that protect beneficial uses within a reasonable timeframe and prevent plume migration to the extent technically and economically feasible.”

We see this pattern of changing the RAOs as a diminution of their strength and a relaxation of the cleanup standards.

We understand that the RWQCB suggested adding the phrase “to the extent technically and economically feasible.” We do not agree that this language is necessary or appropriate, and call on the DOE and the agencies to restore the RAOs mentioned above to their most stringent level.

Therefore we suggest that the RAO under Human Health be modified to state in the ROD: “Prevent human ingestion of groundwater containing contaminant concentrations (single carcinogen) above State and Federal MCLs and any, more stringent WQNLs”.

Under Environmental Protection we suggest the following language for the ROD: “Restore water quality, at a minimum, to WQNLs that are protective of beneficial uses within a reasonable timeframe and to prevent plume migration. Maintain existing water quality that complies with WQNLs. This will apply to both individual and multiple constituents that have additive toxicology or carcinogenic effects.”

7. Milestones.

TVC commented that the plan should contain milestones by which the success of the subsequent cleanup can be evaluated. The remedies and the accompanying plan should contain measurable goals. DOE responded that buildout of treatment systems adheres to CERCLA. Further the DOE states that mass removal and contamination trends and progress are all documented in the semi-annual Compliance monitoring Reports.

While this latter documentation serves some of the objectives in our request, it would be advantageous to set forth in the ROD what the proposed schedule and milestones are, particularly regarding estimates of mass removal rates and attainment of clean-up goals.

8. NEPA and CEQA.

We asked that the National Environmental Policy Act (required for the Interim ROD) and California Environmental Quality Act (required for the Pit 7 Amendment to the Interim ROD) be done in conjunction with this document. We have not received a response. We reiterate the comment and request that the appropriate level of NEPA and CEQA reviews be carried out prior to the issuance of the final ROD.

NEPA applies whenever a federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. The federal agency must prepare an Environmental Impact Statement (EIS) for actions "significantly affecting the quality of the human environment." 42 U.S.C. § 4332. CEQA applies to "projects" proposed to be undertaken or requiring approval by State and local government agencies. Under such circumstances, the lead agency must complete the environmental review process required by CEQA, which necessitates the preparation of an Environmental Impact Report (EIR) where "significant" impacts are found.

9. Remediation.

TVC remains convinced that the remedy for the Pit 7 Complex should contain an element of downstream hydraulic control. We acknowledge DOE's disagreement with this point of view, and we incorporate by reference the arguments that we have already made in writing and in person on numerous occasions.

In particular, we note that the more protective RAO wording in prior documents regarding the objective of preventing plume migration was in part a response to TVC's concerns that additional hydraulic control will be necessary to accomplish an adequate cleanup of the Pit 7 Complex.

Therefore, the "degradation" of the RAOs in the draft ROD that we noted above becomes an issue of particular importance. The Pit 7 Complex cleanup is not yet in the implementation phase. Thus, problems beyond those presently anticipated may well surface in the future, including plume migration.

10. Specific Comments on the Proposed Plan and draft ROD.

Regarding our comment on Proposed Final Cleanup Actions, Building 850 firing table, DOE responded that public input would be solicited prior to any remedial action concerning perchlorate. While we support this, it would be helpful to know how public input will be solicited. Is this being done as part of the upcoming EE/CA and public meeting in March 2008?

Additionally, in response to our prior comment that monitoring should be located upstream from the Building 850 firing table contaminant plume to ensure that diverted water does not alter the groundwater hydrology, DOE responded that monitoring is part of the remedy "as shown on page 10". It is not clear what document you are referring to. Please clarify, and the comment should be taken as a point of concern, as we are sure that DOE agrees that creating additional hydraulic head in this area will be counterproductive.

On page 2-84 of the Draft ROD, in the discussion about cleanup standards, DOE states that after groundwater concentrations have been reduced to MCLs, DOE will prepare “a technical and economic feasibility analysis as part of the *first* Five-Year Review (emphasis added). While we appreciate optimism, was this a misstatement? Should it have read the “subsequent” Five-Year Review(s)? (We noticed this statement several times in the document.)

With regards to future activities at Site B-812 (OU9), and B-865, and the Sandia Test Site, please identify planned activities in the draft ROD.