

Petition for Review
Hazardous Waste Facility Permit for Lawrence Livermore
National Laboratory Main Site

Reviewer:
Mr. Paul Ruffin
Office of Permit Appeals
California Department of Toxic Substances Control
8800 Cal Center Drive
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Submitted April 22, 2016 via email by:
Tri-Valley CAREs
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Permit Appeals Officer:

Tri-Valley Communities Against a Radioactive Environment (CAREs), on behalf of our members and constituents, hereby petitions the Department of Toxic Substances Control (“DTSC”) to review the Final Hazardous Waste Facility Permit (“Permit”) decision for the Lawrence Livermore National Laboratory (“LLNL”) issued by DTSC on May , 2014. This Petition demonstrates the factual, legal and policy reasons that require DTSC to accept our Petition for Review and deny LLNL’s.

We call on DTSC to review the fundamentally flawed and incorrect determination that the permit and its conditions are fully protective of public health and the environment. Pursuant to 22 CCR § 66271.18(a), Tri-Valley CAREs specifically petitions the Department to review General Condition 2(B): The Permittee is permitted to treat, store and dispose of hazardous wastes in accordance with conditions of this Permit.

Tri-Valley CAREs has the right to petition for a review of any and all conditions of the permit decision. In this petition, Tri-Valley CAREs incorporates our previous comments, responds to DTSC’s responses, and demonstrates that much of the permit is based on findings of facts and conclusions at law that are clearly erroneous and/or are not supported by analysis or adequate explanation.

Our Petition/Appeal must be accepted for review for the following reasons:

(1) All issues raised in this Petition were raised by Tri-Valley CAREs in written and verbal comments during the public comment period for this permit process;

(2) Our Petition clearly describes the important policy considerations regarding environmental health and justice and cumulative impacts that require DTSC to exercise its discretion to review our Appeal and Petition;

(3) This Petition challenges the entire Permit and all permit conditions as they are:

- Potentially inadequate to protect public health and will allow a significant and unacceptable increase in pollution that will threaten the health of residents in a community long burdened with pollution and health problems emanating from the LLNL main site;
- based on scientifically defective studies;
- the DTSC's reliance on LLNL's outdated SWEIS and other planning documents;
- based on findings of facts and conclusion of law that are clearly erroneous.

(4) This Petition demonstrates that many of DTSC's "Response to Comments" are incomplete and/or inaccurate and that numerous key comments were not responded to at all.

The DTSC repeatedly states that it has conducted a review and the operations are safe without offering any information or reason for the statement. The permit application submitted by LLNL is inadequate, a simple comparison of the previous Part B application with the stripped down recent version of the document shows the inadequacy.

The DTSC does not state any reason why the risk assessment is adequate. Stating simply that it does not make it so.

On Page 20 & 23 and many other times the responses incorrectly refer to a Site Wide Environmental Impact Statement dated 2011 or 2015. No such document exists. The Lab did not conduct a SWEIS in 2011. The Lab simply produced a supplement analysis to the 2005 SWEIS in 2011 that did not so much as mention the hazardous waste operations. No subsequent Site Wide NEPA analysis has been performed, a point raised repeatedly in comments. It is our understanding that the site has a site wide review in process and we repeatedly requested DTSC to wait for the draft of that document before issuing this permit. That comment was not accurately or adequately addressed in the responses to comments.

Page 24 states that waste minimization plans are in place and are available upon request. What are the results of the plans and activities? Has hazardous waste generation been minimized? If so how? It is the DTSC's responsibility to monitor these activities and make sure that the plans are implemented in a serious manner. It is inadequate for the agency to state in a CEQA document that plans exist without any analysis of those plans, whether they will have the intended results, whether they are implemented across the site, whether they address all types of hazardous wastes or just the easiest, etc.

On Page 28, DTSC's response is inadequate. The application does not provide enough information to satisfy title 22CCR requirements statement below.

66264.601(c) states, (emphasis added)

prevention of any release that may have adverse effects on human health or the environment due to migration of **waste constituents, hazardous constituents, or reaction products**, in the air, considering:

- (1) the volume and **physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols, and particulates**;
- (2) **the effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air**;
- (3) the operating characteristics of the unit;
- (4) the atmospheric, meteorologic, and topographical characteristics of the unit and the surrounding area;
- (5) the existing quality of the air, including other sources of pollution and contamination and their cumulative impact on the air;
- (6) **the potential for health risks caused by human exposure to constituents of concern**; and
- (7) **the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to constituents of concern**.

LLNL has included a comprehensive list of waste codes in the Part A. the list is so broad that it would enable LLNL to treat virtually any kind of waste. Further, the air pollution control system has changed since the risk assessment was written. This means that two very important aspects of the risk assessment have changed and the risk assessment that the DTSC is relying upon is invalid. The DTSC must demand a new risk assessment that is performed based upon up-to-date protocols that would also consider the hazards of the waste streams that they are authorizing and the current air pollution control system. Further, LLNL and DTSC practically nullified any limitation on what kind of waste can be treated in any of the units by inducing comment 47 and the response. Also LLNL has not performed an ecological risk assessment.

Page 29, DTSC states “Whether WIPP is open or closed does not affect the management of TRU mixed...” That is incorrect. If WIPP does not open for new shipments of waste, which it is not expected to be for a number of years, it affects the management of the waste in that it would be at LLNL indefinitely. The DTSC must be more vigilant in their requirements of managing wastes that will be stored for many years or even decades. It is our understanding that state agencies that regulate other sites with WIPP TRU destined waste, in New Mexico and Washington for example, are taking a look and making adjustments to account for WIPPs long-term closure.

Page 32 states, “DTSC cannot comment on similarity between LLNL and Los Alamos National Lab...” Nor was the agency being asked to. The comment simply asserts that there are similar operations at the two labs, and that the DTSC needs to ensure that hazardous operations that have caused severe environmental and human health damage at LANL to not happen at LLNL. There is not another nuclear weapons research and development site in California that the DTSC

regulates, and in fact, LANL is the nation's only other full scale nuclear weapons design laboratory. LLNL is a unique site for DTSC and the commenter was simply stating an obvious "good practices" observation, that DTSC should make itself aware of the New Mexico Environment Department's implementation of RCRA's hazardous waste permitting requirements at LANL, their lessons learned, best practices, etc.

Page 34, Responses to comment 4, 16 states, and "Section 66270.23(c) requires LLNL supply additional information..."

It states that "owners and operators of facilities that transfer, treat, store, or dispose of hazardous waste in miscellaneous units shall provide the following additional information:... (c) information on the potential pathways of exposure of humans or environmental receptors to waste constituents, hazardous constituents and reaction products, and on the potential magnitude and nature of such exposures;"

The DTSC response that the information has been provided in Volume 1 and 2. The information provided in those volumes is inadequate and does not meet the requirement stated above.

Page 37, Response to comment 7 states that the current application is more concise than the previous application. This is a false statement; the application is incomplete. The current application is much more general than the previous one. The comment cites examples of areas in the application (we can point to many more) that in effect say that we comply with the regulations without any implementing procedures or descriptions. This approach is acceptable in a permit by rule situation, but not for a full permit.

Page 38, response to comments 15 and 31 are incorrect. The DTSC is responsible for all hazardous waste activities on site. It is true that the inspection of waste generator areas have been delegated to local agencies, however, it is the DTSC's rules that the local agencies inspect against. The DTSC must also take into account violations of hazardous waste regulation, including the ones overseen by the local agencies. Their permit is the tool to use in cleanup of hazardous waste areas, enforcing hazardous waste regulations and to make sure the facility is in good standing.

The DTSC staff obviously have not coordinated with the local agencies in issuing this permit. The CUPA for LLNL is not the County Health Department it is the Livermore Fire Department. Coordination with other regulatory agencies and making sure that the site is in good standing is an important part of the permitting process.

Page 40 response to comment 23 is inadequate. The application needs to be revised to include the detail. The commenter presented examples of deficiencies in the application to show that a good scientific and engineering review of the application has not been performed. In response, the agency points to inadequate sections of the application and provides explanation for macro-encapsulation that should be in the permit application and not in the response to comments. There are other instances in the application where the information is inadequate and it is the DTSC's responsibility to make sure that the application is complete. The closure plans in the

application do not meet the requirements stated in the comment. Will all closures require a new closure plan at the time of closure?

In the section about the contingency plan reporting the response states, “LLNL will notify DTSC in case of fire, explosion and/or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.” LLNL has a history of accidents that were not reported. Who decides that a release “could threaten human health or the environment? How is the decision made? DTSC would never know if someone at LLNL decides that a release could not threaten human health and the environment.

Page 50, response to comments 19, 21, 23, 30 is inadequate. The permit advisory is DTSC’s policy and is enforced. The DTSC acknowledges that the advisory is applicable; the response states; “The advisory is applicable on a case-by-case for permitted hazardous waste management units that are to be converted to general accumulation units.” The questions still stand – how have the DTSC and LLNL demonstrated that closing the units will shut down or seriously disrupt the facility operations?

The response states that if sampling activities are performed adjacent to active units the risk of hazardous waste being released increases due to human error or... Closure of units within units are performed regularly without incidents. These processes are understood and performed routinely. The areas in question are not close to the “active” units. Further DTSC’s reasoning, “if historical information is not kept” for not performing closure is nonsense. Also, CERCLA does not deal with or investigate RCRA areas. These are completely different regulation and deal with different problems. DTSC’s reasoning in this response is not based on scientifically studies of any kind.

The DTSC must ensure that units are closed in an environmentally sound manner. Closure must be conducted based on a written plan that has been reviewed and approved by the DTSC. The DTSC has not demonstrated that the closures occurred based on a detailed plan that was reviewed by DTSC. WE request that DTSC provide the plans.

Page 57, Response to comment 32, the DTSC has not responded to the question and has simply stated that the DTSC has studied the situation. The DTSC needs to offer how based the analysis was performed and then inform the public about the results. Again this is a full permit, but the DTSC is handling it as if it is a permit by rule.

The DTSC appears to misunderstand the purpose of SB14 in waste minimization. Treatment of waste after it is produced is not waste minimization. It is understood that wastes must be treated, handled and disposed of in a proper manner; however, SB14’s purpose is to minimize the **generation** of wastes. The DTSC must evaluate how LLNL reduces waste generation, a task which has not been illustrated in the permit.

Comment 47, LLNL has changed many aspects of their operations, including adding practically all EPA and California waste codes by simply adding a footnote and making changes to operations of some of the units. The DTSC has concurred by simply stating that all proposed

changes have been reviewed. The DTSC must consider the environmental effects of adding new waste constituents to the units. The processes of units are different and so are their control devices. Major changes such as these deserve to be evaluation in a much more rigorous manner than being added to a permit by a cryptic response to comments. The public has not had enough time to study the impact of these changes. The permit application and the CEQA document must be revised before these changes are allowed.

Conclusion: As a state agency mandated to protect public health and the environment, ensure compliance with the law including permits, provide meaningful opportunities for public involvement, DTSC's permit is defective and DTSC must accept our Appeal and Petition for Review and then update the application and rigorously review the Livermore Lab's Main Site hazardous waste permit.

Sincerely,

s/Scott Yundt
Staff Attorney
Tri-Valley CAREs