

1 STATE OF CALIFORNIA
2 ENVIRONMENTAL PROTECTION AGENCY
3 DEPARTMENT OF TOXIC SUBSTANCES CONTROL

4 In the Matter of:) Docket PAT-FY16/17-001
5)
6 Lawrence Livermore National Laboratory) ORDER PARTIALLY GRANTING
7 7000 East Avenue) PETITION FOR REVIEW AND DENIAL
8 Livermore, California 94550) OF REVIEW
9 County of Alameda)
10 U.S. EPA ID. NO. CA2890012584) California Code of Regulations,
11) Title 22, Section 66271.18
12)

11 **I. INTRODUCTION**

12 On March 11, 2016, the Department of Toxic Substances Control (Department or
13 DTSC) issued a Hazardous Waste Facility Permit (Permit) for Lawrence Livermore
14 National Laboratory (LLNL), located at 7000 East Avenue, Livermore, California.

15 One petition for review (appeal) of the Department's decision was filed by
16 Mr. Scott Yundt, Staff Attorney, for Tri-Valley Communities Against a Radioactive
17 Environment (CAREs) (Petitioner) on April 21, 2016. Pursuant to California Code of
18 Regulations, title 22, section 66271.14, subdivision (b)(2), the permit modification
19 decision has been stayed pending the Department's determination whether the appeal
20 meets the criteria for granting review. In the interim, LLNL continues to be authorized to
21 operate the facility under the terms and conditions of the extended Hazardous Waste
22 Facility Permit, with an original effective date of November 19, 1999, as subsequently
23 modified.

24 **II. JURISDICTION**

25 The Department of Toxic Substances Control has jurisdiction over hazardous
26 waste facility permits and the imposition of conditions on such permits pursuant to the
27 California Health and Safety Code sections 25200 et seq., 25186.1, subdivision (b)(1),
28 and California Code of Regulations, title 22, sections 66270.30 and 66271.18.

1 **III. BACKGROUND**

2 **A. LOCATION AND DESCRIPTION OF THE FACILITY**

3 The location, history, and description of the facility are presented in the Permit as
4 follows:

5 “Lawrence Livermore National Laboratory (LLNL) is located at 7000 East
6 Avenue in Livermore, Alameda County. The parcel number is 99A-1475-5-7.

7 On May 16, 1983, DTSC granted an Interim Status Document to U.S.
8 Department of Energy as the operator of the Lawrence Livermore National
9 Laboratory facility authorizing the management of hazardous waste. On
10 November 19, 1999, DTSC issued a Resource Conservation and
11 Recovery Act (RCRA) equivalent Permit for the Lawrence Livermore
12 National Laboratory to be operated by the U.S. Department of Energy and
13 the University of California Regents which allowed the continued
14 management of hazardous waste activities with an expiration date of
15 November 19, 2009. The Permit was modified on October 1, 2007 to
16 reflect a single Operator, Lawrence Livermore National Security, LLC.
17 The Permit has also been modified and updated many times since it was
18 issued to ensure that it remained current and enforceable.

19 The Lawrence Livermore National Security, LLC., and the U.S.
20 Department of Energy submitted a timely renewal RCRA hazardous waste
21 facility permit application on April 23, 2009. By law, the Lawrence
22 Livermore National Security, LLC., is allowed to operate under the
23 conditions of the current permit until a final decision is made on the 2009
24 permit application

25 When it was established in 1952, LLNL’s primary mission was conducting research on
26 nuclear weapons. Since then, other major programs have been added and removed to
27 meet national needs including magnetic fusion energy, laser fusion and laser isotope
28 separation, biomedical and environmental sciences, and applied energy technology.
These programs require research in physics, chemistry, materials science, computer
science and technology, biological sciences, and engineering. These programs
generate hazardous and mixed waste. LLNL treats and stores these wastes in tanks
and containers before sending them for final treatment or disposal at an authorized
TSDF. The Facility also has the capability to macro-encapsulate containers with specific

1 waste streams in order to meet Land Disposal Requirements (LDR).”

2 **B. PERMIT DECISION**

3 On April 23, 2009, the Lawrence Livermore National Security, LLC, (LLNS) and
4 the Department of Energy (DOE) submitted a timely application for renewal of the
5 hazardous waste facility permit consisting of a Part A and Part B application. DTSC
6 reviewed the LLNS’s application and found that it met the regulatory requirements for
7 management of hazardous and mixed waste. Based on this review, DTSC prepared a
8 draft permit and an addendum to the previously adopted California Environmental
9 Quality Act (CEQA) document (negative declaration) and requested public comments.
10 The public notice for the Draft Hazardous Waste Permit was issued on April 30, 2015.
11 The public comment period was open from April 30, 2015 to August 3, 2015. DTSC
12 held a public hearing on June 3, 2015, and a transcript of public comments was
13 prepared. Members of Tri-Valley CAREs provided comments at the public hearing and
14 in writing during the comment period. DTSC prepared a “Response to Comments for
15 draft RCRA Hazardous Waste Facility Permit for Lawrence Livermore National
16 Laboratory,” (RTC) dated March 9, 2016. DTSC issued a public notice of the Permit
17 approval on March 11, 2016, and established a period, ending April 21, 2016, for filing a
18 request for review of the permit decision.

19 **C. PERMIT APPEAL PROCESS**

20 Pursuant to California Code of Regulations, title 22, section 66271.18,
21 subdivision (a), the period for filing a petition for review of this permit decision ended on
22 April 21, 2016. The petition for review (PFR) of the LLNL permit decision was submitted
23 by Petitioner on April 21, 2016. On April 29, 2016, the Permit Appeals Officer of DTSC
24 issued a letter to Mr. Thomas Gioconda of LLNL stating that pursuant to California Code
25 of Regulations, title 22, section 66271.14, subdivision (b)(2) the permit decision has been
26 stayed until the Permit Appeals Officer has completed review of the appeal. The review is to
27 determine which, if any, of the issues raised in the appeal meets the criteria set forth in
28 California Code of Regulations, title 22, section 66271.18 for granting review.

1 **IV. STANDARD OF REVIEW**

2 California Code of Regulations, title 22, section 66271.18, subdivision (a),
3 provides that any person who filed comments or participated in the public hearing on a
4 draft permit decision, during the public comment period for the draft permit decision,
5 may petition the Department to review any condition of the final permit decision to the
6 extent that the issues raised in the petition for review were also raised during the public
7 comment period for the draft permit decision, including the public hearing. In addition,
8 any person who did not file comments or participate in the public hearing on the draft
9 permit may petition the Department for review of the final permit decision, but only with
10 respect to those changes in the final permit decision from the draft permit decision.

11 California Code of Regulations, title 22, section 66271.18, subdivision (a), also
12 provides, in pertinent part, that:

13 “The petition shall include a statement of the reasons supporting that
14 review, including a demonstration that any issues being raised were raised
15 during the public comment period (including any public hearing) to the
16 extent required by these regulations and when appropriate, a showing that
the condition in question is based on:

- 17 (1) a finding of fact or conclusion of law which is clearly erroneous, or
18 (2) an exercise of discretion or an important policy consideration which
19 the Department should, in its discretion, review.”

20 California Code of Regulations, title 22, section 66271.12, specifies the extent to
21 which issues are required to be raised during the public comment period for a draft
22 permit decision. Specifically, this section states that:

23 “All persons, including applicants, who believe any condition of a draft
24 permit is inappropriate or that the Department’s tentative decision to deny
25 an application or prepare a draft permit is inappropriate, must raise all
26 reasonably ascertainable issues and submit all reasonably available
arguments and factual grounds supporting their position.”

27 Because Tri-Valley CAREs submitted comments on the draft permit decision
28 during the comment period, they have standing to petition for review of any issues

1 raised during the public comment period for any condition of the draft permit decision,
2 as well as any issues that pertain to changes from the draft to the final permit decision.

3 Additionally, any issues raised in the appeal that relate to the California
4 Environmental Quality Act (CEQA, Public Resources Code, section 21000 et seq.) will
5 not be addressed in this Order. CEQA provides a separate judicial appeals process to
6 resolve disputes concerning compliance with CEQA. The permit appeals process is not
7 the proper forum to raise CEQA issues, as the regulation governing permit appeals
8 provides that petitions for review may request review of permit conditions only.

9 **V. DISCUSSION AND FINDINGS**

10 The Department has reviewed the appeal and hereby responds to the arguments
11 and comments presented in the appeal. Appeal comments have been paraphrased for
12 clarity and brevity. The page number(s) where the appeal comments are located in the
13 PFR are provided in brackets after the comment. The Department has determined that
14 the following appeal comments filed by Petitioner meet the criteria for granting review
15 pursuant to the California Code of Regulations, title 22, section 66271.18, subdivision (a):
16 comments 2, 7, and 9. The Department is denying review of all remaining comments
17 because they fail to meet the criteria for granting review pursuant to California Code of
18 Regulations, title 22, section 66271.18, subdivision (a) or are related to CEQA. The
19 Petitioner's appeal comments and the Department's responses are set forth below.

20 The PFR includes the following summary statements concerning the Permit:

21 "We call on DTSC to review the fundamentally flawed and incorrect
22 determination that the permit and its conditions are fully protective of public
23 health and the environment. Pursuant to 22 CCR § 66271.18(a), Tri-Valley
24 CAREs specifically petitions the Department to review General Condition
25 2(B): The Permittee is permitted to treat, store and dispose of hazardous
wastes in accordance with conditions of this Permit." [PFR, Page 1]

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

- 27 • Potentially inadequate to protect public health and will allow a significant
28 and unacceptable increase in pollution that will threaten the health of

1 residents in a community long burdened with pollution and health
2 problems emanating from the LLNL main site;

- 3 • based on scientifically defective studies;
- 4 • the DTSC's reliance on LLNL's outdated SWEIS and other planning
5 documents;
- 6 • based on findings of facts and conclusion of law that are clearly
7 erroneous." [PFR, Page 2]

8 "What follows are the specific allegations for the need for this petition,
9 corresponding to the specific responses to comment (*page references are
10 to the responses to comments*)." [PFR, Page 2]

11 **COMMENT 1:** The permit relies on LLNL's outdated Site Wide Environmental Impact
12 Statement (SWEIS).

13 "On Page 20 & 23 and many other times the responses incorrectly refer to
14 a Site Wide Environmental Impact Statement dated 2011 or 2015. No
15 such document exists. The Lab did not conduct a SWEIS in 2011. The
16 Lab simply produced a supplement analysis to the 2005 SWEIS in 2011
17 that did not so much as mention the hazardous waste operations. No
18 subsequent Site Wide NEPA analysis has been performed, a point raised
19 repeatedly in comments. It is our understanding that the site has a site
20 wide review in process and we repeatedly requested DTSC to wait for the
21 draft of that document before issuing this permit. That comment was not
22 accurately or adequately addressed in the responses to comments."
23 [PFR, Page 2.]

24 **Response:** The *California Environmental Quality Act, Guidelines Section 15162,*
25 *15163 and 15164, Environmental Document Analysis,* ("Environmental Document
26 *Analysis*") dated April 28, 2015, prepared by DTSC pursuant to the California
27 Environmental Quality Act¹ (CEQA), references the *Final Site-wide Environmental
28 Impact Statement for Continued Operations of LLNL,* ("Final SWEIS") dated March 2005 and
the *Supplemental Analysis of the 2005 Final Site-wide Environmental Impact Statement for
Continued Operations of LLNL,* ("Supplemental Analysis") dated August 2011. The
Environmental Document Analysis does not refer to a 2015 Site Wide Environmental

¹ Public Resources Code, section 21000 et seq.

1 Impact Statement and refers to the 2011 Supplemental Analysis by providing the
2 complete title of the document. This appeal comment does not comment on the permit,
3 but on the text of DTSC's *Response to Comments for draft RCRA Hazardous Waste*
4 *Facility Permit for Lawrence Livermore National Laboratory*, dated March 9, 2016. On
5 page 5, the RTC provides the definition,

6 "2011 SWEIS' refers to the document entitled *Supplement Analysis of the*
7 *2005 Final Site-wide Environmental Impact Statement for Continued*
8 *Operation of Lawrence Livermore National Laboratory* consisting of 2
9 Volumes dated August 2011"

10 The RTC does not define a 2015 Site Wide Environmental Impact Statement, but
11 uses terms such as, "2015 SWEIS Supplemental Analysis" and "2015 Supplemental
12 Analysis." These cases are probably typographical errors with "2015" instead of "2011."
13 Regardless of the dates of some of its reference material, the Environmental Document
14 Analysis was prepared in 2015. CEQA provides a separate judicial appeals process to
15 resolve disputes concerning compliance with CEQA. This appeal comment is denied.

16 **COMMENT 2:** The permit application is inadequate.

17 "The DTSC repeatedly states that it has conducted a review and the
18 operations are safe without offering any information or reason for the
19 statement. The permit application submitted by LLNL is inadequate, a
20 simple comparison of the previous Part B application with the stripped
21 down recent version of the document shows the inadequacy." [PFR, Page2.]

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

25 66264.601(c) states, (emphasis added)

26 prevention of any release that may have adverse effects on human health
27 or the environment due to migration of **waste constituents, hazardous**
28 **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;

- 1 (2) the effectiveness and reliability of systems and structures to reduce or
2 prevent emissions of hazardous constituents to the air;
- 3 (3) the operating characteristics of the unit;
- 4 (4) the atmospheric, meteorologic, and topographical characteristics of the
5 unit and the surrounding area;
- 6 (5) the existing quality of the air, including other sources of pollution and
7 contamination and their cumulative impact on the air;
- 8 **(6) the potential for health risks caused by human exposure to
9 constituents of concern; and**
- 10 **(7) the potential for damage to domestic animals, wildlife, crops,
11 vegetation, and physical structures caused by exposure to
12 constituents of concern.” [PFR, Page 3.]**

13 “LLNL has included a comprehensive list of waste codes in the Part A. the
14 list is so broad that it would enable LLNL to treat virtually any kind of
15 waste. Further, the air pollution control system has changed since the risk
16 assessment was written. This means that two very important aspects of
17 the risk assessment have changed and the risk assessment that the
18 DTSC is relying upon is invalid. The DTSC must demand a new risk
19 assessment that is performed based upon up-to-date protocols that would
20 also consider the hazards of the waste streams that they are authorizing
21 and the current air pollution control system. Further, LLNL and DTSC
22 practically nullified any limitation on what kind of waste can be treated in
23 any of the units by inducing comment 47 and the response. Also LLNL has
24 not performed an ecological risk assessment.” [PFR, Page 3.]

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

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

33 The DTSC response that the information has been provided in Volume 1
34 and 2. The information provided in those volumes is inadequate and does
35 not meet the requirement stated above.” [PFR, Page 4.]

1 “Page 37, Response to comment 7 states that the current application is
2 more concise than the previous application. This is a false statement; the
3 application is incomplete. The current application is much more general
4 than the previous one. The comment cites examples of areas in the
5 application (we can point to many more) that in effect say that we comply
6 with the regulations without any implementing procedures or descriptions.
7 This approach is acceptable in a permit by rule situation, but not for a full
8 permit.” [PFR, Page 4.]

9 “Page 40 response to comment 23 is inadequate. The application needs
10 to be revised to include the detail. The commenter presented examples of
11 deficiencies in the application to show that a good scientific and
12 engineering review of the application has not been performed. In
13 response, the agency point to inadequate sections of the application and
14 provides explanation for macroencapsulation that should be in the permit
15 application and not in the response to comments. There are other
16 instances in the application where the information is inadequate and it is
17 the DTSC’s responsibility to make sure that the application is complete.
18 The closure plans in the application do not meet the requirements stated
19 in the comment. Will all closures require a new closure plan at the time of
20 closure? In the section about the contingency plan reporting the response
21 states, “LLNL will notify DTSC in case of fire, explosion and/or release of
22 hazardous waste or hazardous waste constituents which could threaten
23 human health or the environment.” LLNL has a history of accidents that
24 were not reported. Who decides that a release “could threaten human
25 health or the environment? How is the decision made? DTSC would never
26 know if someone at LLNL decides that a release could not threaten human
27 health and the environment.” [PFR, Page 4-5.]

28 **Response:** This comment includes the various claims in the PFR that the permit
application is inadequate, with references to the relevant responses to comments and
comments on the draft permit. The PFR and the comments on the draft permit do not
identify the relevant permit condition; which is III.1. “Permit Application Documents.”
The PFR identifies the following reasons that the permit application is inadequate:
1) it is shorter and more general than the previous application;
2) it does not include specific information required by California Code of Regulations,
title 22, section 66270.23, subdivision (c) to meet the requirements of

1 section 66264.601, subdivision (c);
2 3) it does not provide implementing procedures or descriptions for how regulatory
3 compliance is achieved;
4 4) there are examples to show that a good scientific and engineering review has not
5 been performed;
6 5) an explanation for macroencapsulation should be in the application;
7 6) the closure plans do not meet the requirements California Code of Regulations,
8 title 22, sections 66264.111 through 66264.115 and will require a new closure plan at
9 the time of closure; and,
10 7) it is not clear how the notification and reporting requirements for the contingency plan
11 will be implemented.

12 Specific permit application deficiencies referenced from the comments on the
13 draft permit are:

14 1) the application allows LLNL to become a full off-site facility and take waste from
15 producers other than Site 300;
16 2) the Waste Analysis Plan includes general statements about approved sampling
17 devices, obtaining representative samples, and annual waste stream verification without
18 providing detailed descriptions and implementing procedures;
19 3) insufficient information has been provided for a new unit for macroencapsulation to
20 evaluate the process for protecting human health and the environment;
21 4) the reporting requirements to notify DTSC in case of an incident are inadequate; and,
22 5) the closure plan must include provisions for partial or final closure, consider future
23 operations, spills, etc., and include a sampling and analysis plan.

24 The appeal comment that the permit application is inadequate meets the
25 requirements of California Code of Regulations, title 22, section 66271.18. The
26 comment is related to a condition of the permit and it was raised during the comment
27 period for the draft permit. The Department grants review of this appeal comment.

28 **COMMENT 3:** The waste minimization plans were not analyzed.

1 “Page 24 states that waste minimization plans are in place and are
2 available upon request. What are the results of the plans and activities?
3 Has hazardous waste generation been minimized? If so how? It is the
4 DTSC’s responsibility to monitor these activities and make sure that the
5 plans are implemented in a serious manner. It is inadequate for the
6 agency to state in a CEQA document that plans exist without any analysis
7 of those plans, whether they will have the intended results, whether they
8 are implemented across the site, whether they address all types of
9 hazardous wastes or just the easiest, etc.” [PFR, Page 2-3.]

[Page 57, Response to comment 32]

9 “The DTSC appears to misunderstand the purpose of SB14 in waste
10 minimization. Treatment of waste after it is produced is not waste
11 minimization. It is understood that wastes must be treated, handled and
12 disposed of in a proper manner; however, SB14’s purpose is to minimize
13 the generation of wastes. The DTSC must evaluate how LLNL reduces
14 waste generation, a task which has not been illustrated in the permit.”
15 [PFR, Page 5.]

16 **Response:** The PFR refers to an inadequacy in the CEQA document for the
17 agency to refer to waste minimization plans without providing an analysis of their
18 performance. To the extent that the waste minimization plan is part of the evaluations
19 for CEQA, the appeal comment is denied. CEQA provides a separate judicial appeals
20 process to resolve disputes concerning compliance with CEQA.

21 However, Comment 1² on the draft permit included reduction of the generation of
22 hazardous waste as an analysis lacking in the permit. Comment 22³ concerning the
23 Part A permit application notes that a waste minimization certification is included, but
24 there is no indication of what was done and what the results were for the 15 years since
25 the original permit was issued. The PFR suggests that DTSC’s evaluation of how LLNL
26 reduces waste generation must be illustrated in the permit. The PFR and the comments

27 ² Comment 1 on page 22 of the Response to Comments for draft RCRA Hazardous Waste
28 Facility Permit for Lawrence Livermore National Laboratory, March 9, 2016.

³ Comment 22, paragraph “b.” on page 57 of the Response to Comments for draft RCRA
Hazardous Waste Facility Permit for Lawrence Livermore National Laboratory, March 9, 2016.

1 on the draft permit do not identify the relevant permit condition; which is III.4. “Annual
2 Hazardous Waste Reduction and Minimization Certification.”

3 The waste minimization requirements of Senate Bill (SB) 14⁴ are in Health and
4 Safety Code, Division 20, Chapter 6.5, Article 11.8 and apply to hazardous waste
5 generators. LLNL is a hazardous waste generator in addition to being a permitted
6 hazardous waste storage and treatment facility. Since June 2012⁵, generators are not
7 required to submit their waste minimization documents, but make them available upon
8 request to DTSC or the Certified Unified Program Agency (CUPA) conducting an
9 inspection pursuant to Health and Safety Code section 25185⁶. The permit application
10 is not required to contain the waste minimization plan. For a permitted facility, California
11 Code of Regulations, title 22, section 66264.73, subdivision (b)(9) only requires an
12 annual certification of the waste minimization plan in the Operating Record.

13 Considering this information, the Department finds that the petitioner has not
14 provided sufficient reasons to support a showing that the permit condition meets the
15 criteria in California Code of Regulations, title 22, section 66271.18 for review. The
16 Department denies review of this appeal comment.

17 **COMMENT 4:** Extended storage of TRU mixed waste due to WIPP closure.

18 “Page 29, DTSC states “Whether WIPP is open or closed does not affect
19 the management of TRU mixed...” That is incorrect. If WIPP does not
20 open for new shipments of waste, which it is not expected to be for a
21 number of years, it affects the management of the waste in that it would
22 be at LLNL indefinitely. The DTSC must be more vigilant in their
23 requirements of managing wastes that will be stored for many years or
24 even decades. It is our understanding that state agencies that regulate

24 ⁴ DTSC refers to SB 14 because the Petitioner refers to SB 14 in their petition. SB 14 was a bill
25 passed in 1985 (Stats 1985, Ch 1030, Sec. 2.) related to waste minimization. The requirements are
26 found in Health and Safety Code, Div. 20, Ch. 6.5, Article 11.8, Hazardous Waste Reduction, Recycling,
and Treatment [25244-25244.10]. It was amended in 2012 by SB 1018 (Stats. 2012, Ch. 39, Sec. 42).

27 ⁵ SB 1018 created Health and Safety Code, Div. 20, Ch. 6.5, Article 11.9 Pollution Prevention and
Hazardous waste Source Reduction and Management Review Act [25244.12-25244.23], effective
June 27, 2012.

28 ⁶ See Health and Safety Code Section 25244.21 and California Code of Regulations, Title 22,
Section 67100.3.

1 other sites with WIPP TRU destined waste, in New Mexico and
2 Washington for example, are taking a look and making adjustments to
3 account for WIPPs long term closure.” [PFR, Page 3.]

4 **Response:** The comment in the PFR appears to be advisory; that DTSC should
5 consider adjustments in permit conditions to account for longer storage times for wastes
6 destined for disposal at the Waste Isolation Pilot Plant (WIPP). The comment⁷ on the
7 draft permit was that the human health risk assessment does not evaluate waste
8 management activities for the transuranic radiological contaminated hazardous waste
9 which is shipped to the WIPP. The health risk assessment⁸ is referenced in the
10 Environmental Document Analysis prepared for CEQA. To the extent that the appeal
11 comment concerns the evaluations for CEQA, the appeal comment is denied. CEQA
12 provides a separate judicial appeals process to resolve disputes concerning compliance
13 with CEQA. The appeal comment does not provide sufficient reasons to support a
14 showing that the permit conditions for waste destined for delayed disposal at the WIPP
15 meet the criteria in California Code of Regulations, title 22, section 66271.18 for review.
16 The Department denies review of this appeal comment.

17 **COMMENT 5:** Consideration of Los Alamos National Laboratory practices.

18 “Page 32 states, “DTSC cannot comment on similarity between LLNL and
19 Los Alamos National Lab...” Nor was the agency being asked to. The
20 comment simply asserts that there are similar operations at the two labs,
21 and that the DTSC needs to ensure that hazardous operations that have
22 caused severe environmental and human health damage at LANL to not
23 happen at LLNL. There is not another nuclear weapons research and
24 development site in California that the DTSC regulates, and in fact, LANL
25 is the nation’s only other full scale nuclear weapons design laboratory.
26 LLNL is a unique site for DTSC and the commenter was simply stating an
27 obvious “good practices” observation, that DTSC should make itself aware
28 of the New Mexico Environment Department’s implementation of RCRA’s

⁷ Comment 12 on page 28 of the Response to Comments for draft RCRA Hazardous Waste Facility Permit for Lawrence Livermore National Laboratory, March 9, 2016.

⁸ Health Risk Assessment for Hazardous Waste Treatment and Storage Facilities, LLNL, December 2010.

1 hazardous waste permitting requirements at LANL, their lessons learned,
2 best practices, etc.” [PFR, Page 3-4.]

3 **Response:** The comment in the PFR appears to be advisory; that DTSC should
4 consider the experience of New Mexico’s permitting of the Los Alamos National
5 Laboratory (LANL) because the operations are similar. The comment⁹ on the draft
6 permit refers to operations at LANL that caused an accident at WIPP. DTSC’s
7 response on page 32 of the RTC indicates that DTSC evaluated LLNL’s operations
8 independently from the operations at LANL.

9 The appeal comment does not describe how DTSC’s decision to not to consider
10 LANL operations supports a showing that the permit condition meets the criteria in
11 California Code of Regulations, title 22, section 66271.18 for review. The Department
12 denies review of this appeal comment.

13 **COMMENT 6:** Responsibility for hazardous waste generator requirements.

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

21 The DTSC staff obviously have not coordinated with the local agencies in
22 issuing this permit. The CUPA for LLNL is not the County Health
23 Department it is the Livermore Fire Department. Coordination with other
24 regulatory agencies and making sure that the site is in good standing is an
25 important part of the permitting process.” [PFR, Page 4.]

25 **Response:** The comment in the PFR responds to a statement in the response
26 to comments,

27 _____
28 ⁹ Comment 12, on page 30 of the Response to Comments for the draft RCRA Hazardous Waste
Facility Permit for Lawrence Livermore National Laboratory, March 9, 2016.

1 “The requirements for the generation of hazardous or mixed waste are
2 covered under Chapter 12 of division 4.5 and, as such, are not required to
3 be part of the permit since that activity is independent of permit
4 requirements.¹⁰”

5 The issue raised in the PFR was not the issue raised in draft permit comments
6 15 and 31, which was that there was no analysis of the impact of the waste after it
7 leaves LLNL and is transported to the next treatment or disposal facility. However, the
8 issue of addressing generator areas in the permit was raised in other comments on the
9 draft permit; see RTC pages 47 to 54 for comments 17, 20, and 30.

10 In the response to comments 15 and 31, DTSC was responding to a portion of
11 draft permit comment 15,

12 “Also, Volume 3, Waste Analysis Plan does not contain enough
13 information. Since there are many waste producers at LLNL, the Waste
14 Analysis Plan must first contain a description of how wastes flow through
15 the system and eventually are accepted into hazardous waste
16 management facilities on-site and off-site.¹¹”

17 “Producers” is another term for “generators.” This draft permit comment requests
18 a description of how LLNL waste generators manage waste as it moves through LLNL
19 and is sent off-site. DTSC’s response was that the Waste Analysis Plan contained
20 adequate information for the regulatory requirements for facility owners and operators,
21 but that waste generator requirements were not required to be part of the permit.

22 Portions of the generator requirements in California Code of Regulations, title 22,
23 division 4.5, Chapter 12 “Standards Applicable to Generators of Hazardous Waste”
24 apply to LLNL as specified in section 66262.10. However, generator activities are not
25 required to be in the permit application or the permit pursuant to Chapter 20, Article 1
26 “General Information,” Article 2 “Permit Application,” and Article 3 “Permit Conditions”
27 which refer to the requirements in Chapter 14 “Standards for Owners and Operators of

28 ¹⁰ Response to Comments 15, 31, second paragraph, in the Response to Comments for draft
RCRA Hazardous Waste Facility Permit for Lawrence Livermore National Laboratory, March 9, 2016.

¹¹ Comment 15, second paragraph, on page 38 of the Response to Comments for draft RCRA
Hazardous Waste Facility Permit for Lawrence Livermore National Laboratory, March 9, 2016.

1 Hazardous Waste Transfer, Treatment, Storage, and Disposal Facilities,” Chapter 16
2 “Recyclable Materials (Recyclable Hazardous Wastes),” and Chapter 18 “Land Disposal
3 Restrictions,” but not to Chapter 12.

4 The appeal comment does not provide sufficient reasons to support a showing
5 that the permit condition meets the criteria in California Code of Regulations, title 22,
6 section 66271.18 for review. The Department denies review of this appeal comment.

7 **COMMENT 7:** Delayed closure.

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

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

24 The DTSC must ensure that units are closed in an environmentally sound
25 manner. Closure must be conducted based on a written plan that has
26 been reviewed and approved by the DTSC. The DTSC has not
27 demonstrated that the closures occurred based on a detailed plan that
28 was reviewed by DTSC. WE request that DTSC provide the plans.” [PFR,
Page 5.]

Response: The appeal comment follows up on portions of DTSC’s response to
comments 19, 21, 23, 30 that correspond to comments 19 and 23 concerning permit

1 condition V.1. "Permitted Units Authorized for Delayed Closure." The appeal comment
2 meets the requirements of California Code of Regulations, title 22, section 66271.18.
3 The comment is related to a condition of the permit, it was raised during the comment
4 period for the draft permit, and there are reasons supporting a showing that the permit
5 condition is based on a finding of fact which is clearly erroneous or an exercise of
6 discretion which the Department should review. The Department grants review of this
7 appeal comment.

8 **COMMENT 8:** Waste codes and quantities.

9 "Page 57, Response to comment 32, the DTSC has not responded to the
10 question and has simply stated that the DTSC has studied the situation.
11 The DTSC needs to offer how based the analysis was performed and then
12 inform the public about the results. Again this is a full permit, but the
13 DTSC is handling it as if it is a permit by rule." [PFR, Page 5.]

14 **Response:** Response to comment 22 is on page 57. Draft permit comment 22
15 refers to the lists of waste codes and capacities listed in the Part A. Although the PFR
16 and the draft permit comment do not identify the permit condition, the Part A is
17 approved in permit condition III.1. Comment 22 makes three assertions: 1) only wastes
18 that are produced and need handling at the facility should be listed; 2) LLNL and DTSC
19 need to study and include only the waste types that have been produced in the past few
20 years; and, 3) LLNL and DTSC should study waste production rates for the past few
21 years and only permit activities that are actually needed. The statutory or regulatory
22 justifications for these assertions are not provided in the draft permit comment or the
23 PFR. The relevant portion of DTSC's response to comment 22 on these issues is,

24 "DTSC uses the application in order to authorize the needs enumerated
25 by the applicant. DTSC does not have the statutory authority to define
26 the needs of the facility nor the day-to-day operations that lead to the
27 need described in the permit application."¹²

28 ¹² Response to Comment 22, second paragraph, on page 57 of the Response to Comments for
draft RCRA Hazardous Waste Facility Permit for Lawrence Livermore National Laboratory,
March 9, 2016.

1 The PFR comments on a portion of DTSC’s response to comment 22, “DTSC studied
2 and determined that LLNL appropriately LLNL lists all the wastes that it is expected to
3 manage.” The PFR requests DTSC to describe how this analysis was performed and
4 inform the public of the results.

5 The appeal comment does not meet the requirements of California Code of
6 Regulations, title 22, section 66271.18. Although the comment is related to a condition
7 of the permit and was raised during the comment period for the draft permit, no reasons
8 are provided supporting a showing that the permit condition is based on a finding of fact
9 which is clearly erroneous or an exercise of discretion or an important policy
10 consideration which the Department should, in its discretion, review. The Department
11 denies review of this appeal comment.

12 **COMMENT 9:** LLNL Comment 47 and permit changes.

13 “Comment 47, LLNL has changed many aspects of their operations,
14 including adding practically all EPA and California waste codes by simply
15 adding a footnote and making changes to operations of some of the units.
16 The DTSC has concurred by simply stating that all proposed changes
17 have been reviewed. The DTSC must consider the environmental effects
18 of adding new waste constituents to the units. The processes of units are
19 different and so are their control devices. Major changes such as these
20 deserve to be evaluation in a much more rigorous manner than being
21 added to a permit by a cryptic response to comments. The public has not
22 had enough time to study the impact of these changes. The permit
23 application and the CEQA document must be revised before these
24 changes are allowed.” [PFR, Page 5.]

25 **Response:** DTSC’s response to comment 47¹³ indicates that DTSC will change
26 permit condition III.1. to incorporate the Part A and Part B permit application (Operation
27 Plan) revisions requested by LLNL. That was not done. The final permit identifies the
28 revised July 2015 Operation Plan only on the final permit cover/signature page.

The PFR raises the issue, “Major changes such as these deserve to be evaluated in a

¹³ On page 66 of the Response to Comments for draft RCRA Hazardous Waste Facility Permit for Lawrence Livermore National Laboratory, March 9, 2016.

1 much more rigorous manner than being added to a permit by a cryptic response to
2 comments.” This comment suggests that DTSC should have used the processes
3 described in California Code of Regulations, title 22, section 66271.13 to respond to the
4 information provided in LLNL comment 47.

5 The PFR reference to a footnote comes from the LLNL comment:

6 “In association with Table 3, added back in the footnote regarding the
7 varied waste streams as follows: “Due to the nature of research and
8 development activities at Lawrence Livermore National Laboratory, there
9 are a large number of waste streams generated with varying hazardous
10 constituents. Therefore, the form codes, EPA hazardous waste numbers,
11 and California waste codes shown are the codes typically found within the
12 management unit, though others may be present, including U and P-
13 codes. These codes shown are meant to provide insight for the
14 management unit, and are not a description of a single waste stream.”¹⁴

15 This footnote statement is not found in the final permit associated with Table 3.
16 Also, the RCRA Part B Permit Application, dated July 2015, in the administrative record
17 provided to the Permit Appeals Officer has the March 2014 version of the Waste
18 Analysis Plan (Part B, Vol. 3, Att. 1), which does not have the footnote on Table 7.1.

19 The appeal comment meets the requirements of California Code of Regulations,
20 title 22, section 66271.18. The comment is related to a condition of the permit, it is a
21 comment related to a change from the draft permit to the final permit, and there are
22 reasons supporting a showing that the permit condition is based on an exercise of
23 discretion which the Department should, in its discretion, review. The Department
24 grants review of this appeal comment.

25 To the extent that the comment requests additional evaluations for the California
26 Environmental Quality Act (CEQA), the appeal comment is denied. CEQA provides a
27 separate judicial appeals process to resolve disputes concerning compliance with
28 CEQA.

¹⁴ Second paragraph of Comment 47 on page 63 of the Response to Comments for draft RCRA Hazardous Waste Facility Permit for Lawrence Livermore National Laboratory, March 9, 2016.

1 **VI. ORDER**

2 For the reasons set forth above, the Department grants review of Comments 2,
3 7, and 9. Review of Comments 1, 3, 4, 5, 6, and 8 is denied.

4 Pursuant to California Code of Regulations, title 22, section 66271.18,
5 subdivision (c), the Department will issue a public notice to set a briefing schedule for
6 Comments 2, 7, and 9 for which review has been granted. Interested parties will be
7 given an opportunity to file written arguments pertaining to these 3 comments in
8 accordance with the briefing schedule.

9 The written arguments should include all reasonably available arguments and
10 factual grounds supporting their position, including all supporting material. To assure
11 complete consideration, all supporting materials should be included in full and may not
12 be incorporated by reference, unless they are already part of the administrative record,
13 or consist of State or Federal statutes and regulations, Department of Toxic Substances
14 Control or U.S. Environmental Protection Agency documents of general applicability, or
15 other generally available reference materials. Additionally, the briefing documents must
16 provide facts showing the technical, regulatory or statutory basis for the requested
17 outcome, and must be accompanied by the data and other reference material that is
18 used to support the argument, including citations to the administrative record.

19 All arguments pertaining to the Appeal Comments that have been granted review
20 must be signed, and filed in writing, received by the date specified in the public notice,
21 and addressed as follows:

22 Ms. Pauline Batarseh
23 Permit Appeals Officer
24 Attn: Mr. Paul Ruffin
25 Department of Toxic Substances Control
26 8800 Cal Center Drive
27 Sacramento, California 95826-3200

28 An additional electronic copy of the briefing arguments may be emailed to
appeals@dtsc.ca.gov.

