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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

EP2012-5129

May 24, 2012

Kevin W. Smith, Manager
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Michael Brandt, Associate Director
Environment, Safety, Health, & Quality
Los Alamos National Security, LLC
Los Alamos Research Park
P.O. Box 1663, MS K491
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**RE: DISAPPROVAL
TA-63 TRANSURANIC WASTE FACILITY
PERMIT MODIFICATION REQUEST
REVISION 1.0
LOS ALAMOS NATIONAL LABORATORY
EPA ID# NM 0890010515
LANL-11-045**

Dear Messrs. Smith and Brandt:

The New Mexico Environment Department (Department) has received the *Permit Modification Request for Technical Area 63, Transuranic Waste Facility, Hazardous Waste Container Storage Unit, Revision 1.0* (PMR), dated April 16, 2012, from the United States Department of Energy and Los Alamos National Security, LLC collectively the Permittees. The Permittees seek to modify the Hazardous Waste Facility Permit (Permit) for Los Alamos National Laboratory (LANL) for the construction of a new Transuranic Waste Facility (TWF) at Technical Area 63 (TA-63) to store mixed transuranic and hazardous waste.

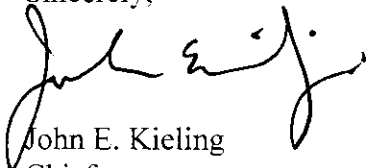
The Department has reviewed the Permittees' *Response to Notice of Deficiency* and the PMR, and hereby notifies the Permittees of its disapproval of the PMR. The Permittees must address the attached comments or deficiencies before the Department can further evaluate the PMR. The Permittees' response to this Disapproval must include five items: 1) a narrative responding to each of the comments; 2) a revised electronic version of the PMR with changes tracked; 3) a

Messrs. Smith and Brandt
May 24, 2012
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revised PDF version of PMR without tracked changes; 4) a revised Word version of the PMR without tracked changes; and 5) a hard copy of the revised PMR. The Permittees must respond to this Disapproval no later than July 13, 2012.

If you have questions regarding this correspondence, please contact Tim Hall of my staff at 476-6049 or at timothy.hall@state.nm.us.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

JEK/th

Attachment

- 1) Comments and Deficiencies

cc:

J. Davis, RPD, NMED
J. Kieling, HWB, NMED
T. Hall, HWB, NMED
L. King, EPA 6PD-N
T. Grieggs, ENV-RCRA, LANS, MS-K490
M. Haagenstad, ENV-RCRA, LANS, MS-K404
G. Bacigalupa, ENV-RCRA, LANS, MS-K404
G. Turner, DOE-LASO, MS-A316

File: Reading and LANL Permit 2012

LANL-11-045

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ATTACHMENT

COMMENTS

PERMIT MODIFICATION REQUEST FOR TECHNICAL AREA 63, TRANSURANIC
WASTE FACILITY, HAZARDOUS WASTE CONTAINER STORAGE UNIT, REVISION 1.0
(APRIL 16, 2012)

LOS ALAMOS NATIONAL LABORATORY
HAZARDOUS WASTE FACILITY PERMIT

Introduction:

The New Mexico Environment Department (Department) provides the following comments regarding the *Permit Modification Request for Technical Area 63, Transuranic Waste Facility, Hazardous Waste Container Storage Unit, Revision 1.0* (PMR) and the *Response to Notice of Deficiency (NOD)*, dated April 16, 2012, from the Permittees. The Permittees seek to modify the Hazardous Waste Facility Permit (Permit) for Los Alamos National Laboratory (LANL) for the construction of a new Transuranic Waste Facility (TWF) at Technical Area 63 (TA-63) to store mixed transuranic and hazardous waste.

Specific Section Comments

1. The Permittees' Response to NOD Comment 2 did not completely address the comment. Revise Table 1-1 to address the requirements at 40 CFR 264.75, 264.175(c), 264.176, 264.177(a), 264.177(b), 264.177(c), 264.17(b), 264.17(c), and 270.27. Also, the response to Comment 2 states that Section 2.2.6 of the PMR addresses 40 CFR 264.175(b)(5). Section 2.2.6, *Other Project Structures*, does not address the cited requirements; however, it is addressed in Section 2.2.5, *Retention Basin*.
2. Section 2.2 still states that Figure 2-5 depicts "the location of areas where storage will occur highlighted," but the figure in fact does not have the storage areas highlighted. Revise the section to remove that statement, and instead refer to Figure 55 in Attachment G, *Proposed Revisions to the LANL Hazardous Waste Facility Permit*, and/or Figure F-1 of Attachment F, *TA-63 Transuranic Waste Facility Closure Plan*.
3. Revise Section 2.2.2 to include the definition of "mat slab" as requested in NOD Comment 11.
4. In response to Comment 13, the Permittees revised Section 2.2.4 of the PMR to state: "In some uncommon situations, there is a potential that a waste container could be left in the characterization trailer for greater than [24 hours] and the option for storage should be retained to preserve operational flexibility." Permit Section 3.1(2), however, states that "for purposes of compliance with secondary containment requirements, the holding of a hazardous waste container within a permitted unit for a period not to exceed 24 hours, for transportation, treatment, characterization, or packaging, shall not be deemed storage."

The Permittees argue that secondary containment is not required in characterization trailers because the containers will be inside the trailer; however, the characterization trailers do not meet the definition of secondary containment. Furthermore, "operational flexibility" is neither defined nor a valid reason for an exemption from the secondary containment requirements in 40 CFR 264.175 or the requirements in Permit Section 3.7.1. Revise the PMR and delete the proposed language in Attachment G, Section A.6.4, that conflicts with the requirements in Permit Sections 3.1(2) and 3.7.1. Also see

Comment 26 below.

5. PMR Section 2.2.7.2 states that Standard Large Boxes 2 (SLB2s) and Oversize Waste Boxes (OWBs) are planned to be used for storage of TRU waste at the TA-63 TWF. NMED is not aware of the Permittees' capabilities to characterize and certify such containers to meet the Waste Isolation Pilot Plant (WIPP) Waste Acceptance Criteria (WAC), nor is NMED aware of plans to include such capabilities in the future. Further, OWBs are not WIPP-compliant containers, and NMED is unaware of plans for WIPP to add OWBs to their list of WIPP-compliant containers. Section 2.2.7.1, *Loading and Unloading*, states that all waste containers will be WIPP-compliant. Section 2.2.7.1, and Attachment G, Sections 3.14.1 and A.6, state that waste containers will not be opened during characterization or while in storage at TA-63 TWF; therefore no re-packing of waste will be allowed at TA-63 TWF. Revise the PMR to resolve these discrepancies and describe the plans for ensuring that all containers stored and characterized at TWF will be WIPP-compliant.
6. Section 2.2.7.1 states that there are six types of containers that may be used for storage at the TA-63 TWF: 55-gallon drums; 85-gallon drums; Standard Waste Boxes (SWBs); SLB2s, Pipe Over-pack Containers (POCs) inside 55-gallon drums, and OWBs. Section 2.2.7.2, *Storage*, states that there are four types of containers planned for use at TA-63 TWF: 55-gallon drums; SWBs; SLB2s; and OWBs; although it also states that 55-gallon drums may be over-packed into 85-gallon drums. Table 2-1, however, indicates that there are eight types of containers that will be used for storage at TA-63 TWF, adding 100-gallon drums and Ten Drum Overpacks (TDOPs) to the lists above. Revise the PMR to resolve these discrepancies, and to limit the container types to only those that can be characterized by the Permittees at TWF (or elsewhere at LANL) and that can be certified for disposal at WIPP. Also revise Attachment G, Section A.6 to state that the TWF will only store containers that are WIPP-compliant.
7. The response to Comment 9 references the *Multi-Sector General Permit For Stormwater Discharges Associated with Industrial Activity* (MSGP) issued by the U.S. Environmental Protection Agency (EPA), and the response to Comment 31 states that information about the retention basin storm water monitoring system was not intended to be included in the Permit. In order for the Department to evaluate the Permittees' assertion that storm water sampling at the retention basin is exempt from the requirements at 40 CFR 264.31, the Permittees must provide the MSGP and include the rationale for the exemption.
8. In response to Comments 18 and 19, the Permittees revised Sections 2.2.7 and 2.3 to state that while reactive waste will not be accepted, the TWF "may need to temporarily store these types of waste (e.g., aerosol cans) that have been detected in TRU waste drums during the RTR characterization process." Sections 2.2.7, 2.2.7.5, and 2.3 also discuss management of containers with small quantities of free liquid.

One of the reasons for using radiography is to ensure that containers shipped to WIPP do not contain items prohibited by the WIPP WAC (e.g., free liquids in excess of the WIPP

WAC limits and aerosol cans). When prohibited items are detected, they must be removed (*i.e.*, remediated) before the containers can be shipped to WIPP. Since containers cannot be opened at the TWF, they must be sent to another facility at LANL for remediation. The Permittees have not discussed how containers that do not meet the WIPP WAC will be dispositioned, nor have they defined “temporary” storage of such containers.

Section 2.2.7 states that “the potential exists that a small quantity of free liquid may be present in some containers (*e.g.*, TRU waste determined to contain liquids such as condensation or in smaller internal containers by RTR characterization after waste receipt at the TWF).” Considering that the WIPP WAC allows up to 1% liquid by volume in containers, coupled with the fact that the Permittees are proposing to store SWBs and SLB2s, the statement that *small quantities of free liquid* may be present is misleading. One percent of the volume of an SWB is approximately five gallons, while it is approximately 17 gallons for an SLB2.

Because the stated purpose of the TWF in Section 1.2 of the PMR is to provide “the necessary capacity for management of newly generated TRU waste,” there should be adequate controls to significantly reduce the necessity of managing containers with prohibited items (*e.g.*, liquid and reactive wastes) at the TWF. Revise Sections 2.2.7 and 2.3 of the PMR and propose requirements in Attachment G that address the following:

- Controls to be implemented at the generator sites to prevent prohibited items from being packaged in containers sent to TWF.
 - Specific actions that will be taken at the TWF when prohibited items are detected in TRU waste containers during characterization (*i.e.*, how the containers will be temporarily stored; how they will be labeled; and how they will be dispositioned).
 - The maximum time period that containers with prohibited items will be temporarily stored at the TWF (*i.e.*, define “temporary storage”).
9. Since the stated purpose of the TWF is to provide “the necessary capacity for management of newly generated TRU waste,” revise Section 2.2.7 and propose language in Attachment G to restrict storage at the TWF to only newly generated waste that has never been part of the LANL Site Treatment Plan (STP) inventory, and add a provision that all newly generated TRU waste will be shipped to WIPP within one year of the date it is generated.
10. In response to Comment 38, the Permittees revised Section 2.8 to reference Permit Section 2.8.2. The response to the comment states: “Compliance with the provisions of the Permit Section [2.8.2] is discussed in Section 2.8 with one exception. This is the permit condition that Permittees will ensure that incompatible wastes or materials are not stored so that a release or spill of these wastes might commingle in fire suppression water holding area or tank.”

- The Permittees have not adequately provided the basis for this exception from the requirement in Permit Section 2.8.2, which states: “The Permittees shall ensure that incompatible wastes or materials are not stored so that a release or spill of these wastes might commingle in a fire suppression water holding area or tank.” This requirement is intended to ensure compliance with 40 CFR 264.177, which requires the Permittees to prevent mixing of incompatible wastes in the event of a spill or leak. Revise the PMR to remove the discussion of this exception, and to state how the Permittees will comply with the requirements in Permit Section 2.8.2. If necessary, revise the proposed language in Attachment G to ensure compliance with Permit Section 2.8.2.
11. Figure 2-5 indicates an “Area designated as future expansion,” but there is no explanation of what this future expansion will be. Revise the PMR to discuss what type of future expansion (*e.g.*, additional characterization trailers) the Permittees propose in Figure 2-5.
 12. Section 2.4 states that entry stations are shown in Figure 2-34; however, Figure 2-34 does not identify any entry stations. Revise the figure to include the locations of the entry stations.
 13. Several of the references cited in Section 4.0, *Corrective Action*, are not listed in Section 6.0, *References*. Also, the response to Comment 46 states that the *Middle Mortandad/Ten Site Aggregate Investigation Report, Revision 2*, is cited in section 4.2. This report is not cited, nor is it listed in Section 6.0. Revise the PMR accordingly, and provide copies of any references not previously submitted to the Department with the PMR.
 14. Section 2.1.1, *Free Liquids*, of the 2010 LANL Waste Acceptance Criteria for Contact-Handled TRU Waste (provided as a reference in Section 6.0) is inconsistent with the current WIPP WAC. Since the LANL WAC is used to control prohibited items during packaging of containers to be managed at the TWF for shipment to WIPP. Revise the LANL WAC to be consistent with the WIPP WAC.

Attachment F (Closure Plan) Comments

15. Section 1.0 of Attachment F states: “[t]he TWF unit will be closed by removal of the major structures and equipment.” The statement that *major* structures and equipment will be removed appears to be inconsistent with Section 5.3, *Removal and Decontamination of Structures and Related Equipment*, which seems to state that all structures and equipment will be either 1) removed and disposed of as solid (potentially hazardous) waste, or 2) decontaminated and removed from TWF for re-use by LANL. Revise the statement in Section 1.0 to state that *all* structures and equipment will be removed from TWF at closure.

16. Section 2.0 references Figure 2-5 of the PMR for the TWF Site Plan. Since Figure 2-5 is not proposed to be included in the Permit, remove the reference from the Closure Plan.
17. Section 2.0 references "Characterization Pads." Revise this reference to "Characterization Trailers."
18. Response to Comment 59 includes a revised Table 2 that includes a third column not included in Table 2 of Attachment F. The column includes the basis for the closure activity and schedule, which is useful information, and should be included in Table 2 of Attachment F. Revise Table 2 of Attachment F to include the *Basis* column.
19. Response to Comment 60 (*see* fifth bullet) includes a reference to "the closure modification procedures of Permit Section" but fails to include the actual Permit Section that contains the modification procedures. The Department assumes the appropriate reference to be Section 9.4.8. Revise the PMR, and Attachment F if necessary, to identify the referenced Permit Section.
20. Response to Comment 65 states that Section 5.2.2 was revised to state "that LANL will submit a permit modification for the sampling and analysis plan in accordance with Permit Section 9.4.6, *Records Review and Structural Assessment*, upon determination that additional sampling locations are needed." Section 5.2.2 does not state that the Permittees will submit a permit modification. Revise Section 5.2.2 to state: "If additional sampling locations are necessary, the Permittees will request a permit modification to modify the sampling and analysis plan in accordance with Permit Section 9.4.6."
21. Section 6.1, Bullet c, states that one sample will be collected "to the south of the permitted unit at the storm water discharge drainage location." Figure F-1 indicates that the proposed sampling location is within the permitted unit. Revise Bullet c to state that one sample will be collected "at the south end of the permitted unit at the storm water discharge drainage location."
22. Response to Comment 90 states that "Section 7.4.1 (now 6.4.2.1) has been revised to reference Section 6.4." Section 6.4.2.1 does not reference Section 6.4. Revise the response and/or Attachment F to resolve the discrepancy.
23. Section 10.0, *References*, was revised to include a reference to NMED's 2009 *Technical Background Document for Development of soil Screening Levels*. This document was replaced and superseded by *Risk Assessment Guidance for Site Investigations and Remediation* in February 2012. Revise Section 10.0 to reference this document (*see* NMED/HWB web site, *Guidance Documents*).

Attachment G (Proposed Revisions) Comments

24. Proposed Section 2.5 states that entry stations are shown in Figure 55; however, Figure 55 does not identify the entry stations. Revise the figure to include the locations of the entry stations.
25. As part of the Permittees' response to Comment 103, Section 3.14.1(1) of Attachment G has been revised to state: "The Permittees shall ensure that at the TWF, all containers storing hazardous waste with free liquids are stored on secondary containment pallets as required by Permit Section 3.1(2), except inside the following structures: Trailers 155, 156, and 157." Section 3.1(2) does not require secondary containment pallets; rather, it is the basis for the Permittees' request to exempt the storage of waste in characterization trailers for less than 24 hours from the secondary containment requirements in 3.7.1, *Containers with Free Liquids*. Section 3.1(2) states, "for purposes of compliance with secondary containment requirements, the holding of a hazardous waste container within a permitted unit for a period not to exceed 24 hours, for transportation, treatment, characterization, or packaging, shall not be deemed storage." Revise the proposed language in Section 3.14.1(1) to state that the characterization trailers at TA-63 are exempt from secondary containment requirements in 3.7.1 *as specified* in Section 3.1(2). Also see Comment 4 above.
26. Proposed Section A.6.1 references Figure 2-5; however, Figure 2-5 is not proposed to be included in the Permit. Revise the section to reference Figure 55.
27. Proposed Section A.6.4 includes erroneous information in several places, regarding Real-Time Radiography (RTR) non-destructive evaluation (NDE) characterization equipment, implying that NDE is the same as non-destructive assay (NDA). For example, it refers to RTR as "assay equipment," the High-Efficiency Neutron Counter (HENC), and the Super-HENC. This erroneous description of RTR equipment is also included in Section 2.2.4, *Characterization Trailers*, of the PMR. Revise the discussion of RTR in Section 2.2.4 of the PMR and in proposed Section A.6.4 to differentiate between RTR (NDE) and NDA characterization equipment. Also propose language in the third paragraph of Section A.6 that clarifies the general discussion of characterization activities at TWF.
28. Proposed Section A.6.9 states that "Water will be supplied via the 150,000 gallon tank north of the operations support building..." However, PMR Section 2.5.1 states this tank is 125,000 gallons. Revise the PMR and/or Attachment G to state the correct tank volume.
29. Attachment G skips Section A.6.7 in the section number sequence. Revise the section number sequence in Attachment G, Sections A.6.8 through A.6.10.
30. Propose the installation of a monitoring network capable of detecting contaminant migration toward the TWF from the MDA-C vapor plume in order to prevent completion

of exposure pathways to the TWF structures or other potential receptor locations (see *Comments on Attachment C of the Response to Notice of Deficiency* below).

Comments on Attachment C of the Response to Notice of Deficiency

The Vapor Plume at MDA C in Relation to Pajarito Corridor Facilities, LA-UR-12-02320

1. Section 2.1 Comparison to Threshold Limit Values, page 3, last paragraph

Permittees' Statements: "A total of 28 VOCs have been detected in the vapor plume beneath MDA C in the two years of quarterly monitoring data collected at the site. The maximum vapor-phase concentrations of these constituents were compared to their respective TLVs. Of these, only trichloroethylene (TCE) exceeds its TLV. The TLV for airborne TCE is 10 parts per million (ppm), a standard that is lower than the OSHA standard of 50 ppm. Based on two years of quarterly vapor monitoring, TCE concentrations at MDA C exceed the TLV at depths of 200 to 300 ft below ground surface (bgs), with a maximum of 118% of the TLV. However, TCE concentrations have been determined to be significantly lower than the TLV at the ground surface and at 20 feet below the surface (Figure 3). The TCE concentrations do not exceed the OSHA standard."

NMED Comment: The paragraph cited above omitted the data listed below:

- Between 2006 and 2011, at depths of less than 200-ft bgs, TCE was detected above 10-ppm ($53,700\text{-ug/m}^3$) nine times.
- On April 23, 2011, at vapor monitoring well 50-603471, TCE was detected at 146-ft bgs at $63,000\text{-ug/m}^3$ (11.7-ppm).
- On April 25, 2011, at vapor monitoring well 50-24813, TCE was detected at both 25-ft bgs and 99-ft bgs at $93,000\text{-ug/m}^3$ (17.3-ppm) or 173% of the TLV. This well is one of the vapor monitoring wells closest to the proposed future TRU waste facility.

These data indicate that the maximum vapor-phase concentrations of TCE at MDA C are 173% of the TLV and occur between 25 and 100-ft bgs.

The Permittees incorrectly state that the maximum vapor-phase concentrations present at MDA C that are greater than 100% of the TLV concentrations are located between 200 and 300-ft bgs. It appears that the Permittees' conclusions are based on modeling of data that did not include the maximum TCE concentrations observed in the latest round of vapor sampling at MDA C. The plume modeling presented in the MDA C Phase III Investigation Report was based on average concentrations, not maximums, which must be accounted for in evaluating vapor migration and potential exposure scenarios. Revise Attachment C to address the appropriate depths and contaminant concentrations or remove all references to the attachment from the PMR.

2. Section 4.0, Distribution of the TCE Vapor Plume at MDA C and LANL Worker Safety, page 8

Permittees' Statements: "Figure 3 indicates that the RLUOB and the proposed CMRR-NF facilities are clearly outside of the modeled plume, while the proposed RLWTF and TWF Projects are in areas with low TCE concentrations in comparison to the TLV measurements. Specifically, the proposed RLWTF and TWF Project facilities are in locations in which the measured surface concentrations of TCE are less than 5 percent of the TLV. Utility trenches associated with these three projects are likewise in locations with surface measurements around 5 percent of the TLV." (Paragraph 1*) (*for relation to NMED comments)

"These relationships can also be visualized in "at depth" plan views. Figure 4 represents the TCE vapor plume that would be encountered at a depth of 5 feet bgs. This is useful for understanding how the vapor plume might impact the future construction of the RLWTF building and a series of utility trenches that cross the plume but will not exceed a depth of 5 feet." (Paragraph 2)

"The maximum TCE vapor concentration at the 5-foot depth would be about 30 percent of the TLV in the southeastern corner of MDA C. In the case of the construction of the RLWTF building, it is expected that the TCE vapor concentration would not exceed 2 percent of the TLV at the construction site. The bottoms of the utility line trenches would encounter a TCE vapor concentration estimated at a maximum of around 10 percent of the TLV, and typically much less. Figure 4 also illustrates that TCE vapor plume concentrations in the vicinity of the temporary CMRR Project facilities south of Pajarito Road are anticipated to be minimal. The parking areas would be subject to a TCE vapor concentration less than 5% of the TLV, while the temporary office buildings would be less than 1%. The fact that the parking areas are paved greatly reduces the likelihood of detectable surface concentrations of TCE in the vicinity of the temporary facilities." (Paragraph 3)

"Figure 5 similarly depicts the modeled TCE vapor plume at a depth of 24 feet below the present ground surface. The modeled plume at this depth indicates that the highest concentration of TCE would be around 50% of the TLV in the southeastern corner of MDA C." (Paragraph 4)

"Construction of the TWF includes the leveling of the site to design grade, which will require the removal of fill to a depth of approximately 20 feet below the present surface in the northwestern upslope portion of the project area. The anticipated TCE vapor concentration at the bottom of the construction excavation would be less than 5% of the TLV. The construction of the foundation for the RLWTF water tower would encounter a TCE vapor concentration estimated at around 2% of the TLV." (Paragraph 5)

NMED Comment: Several issues require resolution within this section of the report. The comments are broken out for relation to specific paragraphs quoted above.

1. **Paragraph 1:** The modeled plume does not correlate to the available data and therefore is not appropriate for use with regard to health and safety. This paragraph refers to “measured surface concentrations of TCE” and “surface measurements.” The Department’s administrative record does not contain records of measurements of TCE collected at the ground surface at MDA C. Either provide the referenced data in Attachment C with the appropriate descriptions of data collection and analysis methods or remove these statements from the evaluation.
2. **Paragraph 2:** The modeled plume for TCE vapor-phase contamination at MDA C does not include the most recent sampling results from the MDA C vapor monitoring wells. Figure 4 presents a modeled plume that does not correlate with actual field measurements.
3. **Paragraph 3:** The latest sampling event at MDA C reports concentrations of TCE between 25 and 99-ft bgs to be 173% of the TLV. As the Permittees have stated previously, “[t]he steepest concentration gradients are upward toward the surface, which leads to preferential VOC transport toward the mesa top and yields releases to the atmosphere.” Based on this observation, it is unlikely that the modeled concentration of TCE would decrease from 93,000- $\mu\text{g}/\text{m}^3$ at 25-ft bgs to 16,110- $\mu\text{g}/\text{m}^3$ at 5-ft bgs, a distance of only 20-ft.
4. **Paragraph 4:** “The modeled plume at this depth (24 feet) indicates that the highest concentration of TCE would be around 50% of the TLV in the southeastern corner of MDA C.” Data from the most recent sampling event at MDA C lists TCE levels at this location at a depth of 25 feet as 173% of TLV. Use of an average TCE concentration for the model, instead of measured concentrations, yields an average concentration at 25-ft bgs greater than 50% of the TLV.
5. **Paragraph 5:** The estimates of anticipated TCE vapor concentrations do not correspond to the available data; therefore, the model as presented does not provide support for the Permittees’ conclusions.

Revise Attachment C to address all of the available data rather than assumed model TCE concentrations or remove all references to the attachment from the PMR.

3. **Section 5.0, Conclusions Regarding the Health Risks of the TCE Vapor Plume at MDA C, page 11**

Permittees’ Statements: “Investigations at MDA C have defined a vapor plume beneath the site. The maximum trichloroethylene (TCE) concentrations in the plume exceed the American Conference of Governmental Industrial Hygienists Threshold Limit Value (TLV) for adversely affecting human health at a subsurface depth of between 200 and 300 feet. On the surface, the maximum is slightly more than 30% of the TLV in the southeastern corner of MDA C. These percentage values drop off below 10% of the TLV in all areas represented by present and planned Pajarito Corridor infrastructure projects.

This document provides information that indicates that the vapor plume does not pose a threat to the health of LANL workers nor will it pose a threat to workers during construction of proposed facilities along Pajarito Road.”

NMED Comment: The Permittees’ conclusion is not supported by the data included in the Department’s administrative record (See Comment 2 above). In addition, TCE concentrations detected “on the surface,” implies that TCE is detectable above ground. Ambient air movement would significantly dilute detected TCE concentrations indicating that subsurface vapor migration is a concern at the TWF that requires a monitoring network.