ERID-521307

NEW MEXICO ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.nmenv.state.nm.us

EP2012-5239

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 26, 2012

Anthony R. Grieggs
Group Leader
Water Quality and RCRA Group
Los Alamos National Laboratory
P.O. Box 1663, M704
Los Alamos, New Mexico 87545

Gene E. Turner
Environmental Permitting Manager
Environmental Projects Office
Department of Energy
Los Alamos Site Office
3747 West Jemez Road, MS A316
Los Alamos, New Mexico 87454

U1201983

RE: DISAPROVAL
CLOSURE PLAN FOR TA 16-399 OB UNIT AREA AND BURN TRAY
LOS ALAMOS NATIONAL LABORATORY
EPA ID# NM0890010515
HWB-LANL-12-040

Dear Messrs. Grieggs, and Turner:

The New Mexico Environment Department (Department) has received the *Revised Interim Status Closure Plan for Open Burning Treatment Unit TA-16-399 Burn Tray* (Closure Plan) *Revision 1.0* dated May 3, 2012, and referenced by ENV-RCRA-12-0101/LAUR 12-20766 submitted by the United States Department of Energy and the Los Alamos National Security, L.L.C. (collectively the Permittees). The Permittees seek to close the Technical Area 16-399 open burning unit. The New Mexico Environment Department (the Department or NMED) hereby issues this Disapproval with the following comments.

Specific Comments:

1. **Section 2.1, Description of the Unit and Waste Treated at the Unit, page 1:**
   Rename or divide this section into subsections describing treatment methods, waste types, and treatment volumes. Revise this section to include the estimated volume of kerosene or other fuels used per treatment. Include a description of materials treated at the unit, (*e.g.*, bulk high explosives (HE) consisting of RDX, C4, HMX) or include a table listing the waste types and maximum volumes allowed per treatment event. Include a list of ignition materials and volumes and describe the methods for ignition of the waste in this subsection.

2. **Section 3.0, Estimate of Maximum Waste Treated, page 1,**

   a. Provide the dates of operation and the history of waste treatment including a description of changes in the types of waste treated and any changes in treatment methods.

   b. Include the volume range of waste treated per event as a range weight (*e.g.*, 35-250 lbs) by waste type. See Comment 1 above.

3. **Section 4.1, Closure Performance Standard, page 1:**
   This section may be shortened to reference the permit standards previously cited (40 CFR 265.111 and Permit 11.6) in the original Interim Status closure plan. Remove the discussion of the Clean Water Act and ground water monitoring activities, since the quantities of detectable constituents from the unit cannot be differentiated from other potential sources in the vicinity of the area.

4. **Section 4.1, Closure Performance Standard, page 2**
   NMED understands that the Permittees intend to reuse this site. Revise this section to remove the quotations from the regulations and include a discussion regarding the relevant cleanup levels included in Permit Section 11.6.

5. **Section 4.2, Closure Schedule, page 3:**
   Revise the closure schedule to reflect the steps already completed, such as the structural assessment. Specify that that unit is no longer in use. Revise the text and Table 1 accordingly. Revise the text to identify which parts of the unit will be removed and those that will remain at the site in greater detail, and include a reference to Section 5.2.

6. **Section 5.1.2, Structural Assessment, page 4:**
   Update the structural assessment section to include the observations made during the site inspection. Include documentation, such as photographs and any measurements or scale drawings of the cracks observed on the concrete pad.

7. **Section 5.2.1, Removal of Structures and Equipment, page 4:**
Clarify that the metal components of the unit will be treated at unit 16-388 (flash pad) to remove residual explosives constituents prior to recycling. Provide a description of the brick disposal or reuse.

8. **Section 5.2.3, Equipment Used During Decontamination, page 5:**
Describe the "wash water solution" clarify if the wash water solution is the same surfactant detergent(*e.g,* Alconox®) listed in Section 5.2.2. Describe the methods that will be used to decontaminate re-usable equipment, tools, and protective clothing. Describe the characterization methods used prior to disposal of the decontamination water.

9. **Section 6.2.1, Surface Water and Groundwater Sampling, page 6:**
Revise this section to include the recent data from analysis of storm water samples collected from the nearest surface water gauging station, (*i.e.*, Fish Ladder) to evaluate potential contaminant migration due to storm water runoff. Discuss possible contaminant sources that could affect storm water quality, and include a map of the site depicting the site and the sampling station.

10. **Section 6.2.2, Soil Sampling, page 7:**
Provide a written description of the methods and sampling locations for the used to collect surface and subsurface soil samples. This includes providing a detailed description of the methods, instruments, quality control samples, and depths of sample collection. Revise the text and Tables 2 and 5 accordingly.

11. **Section 6.2.3, Wipe Sampling, page 7:**
Describe the equipment and need for wipe sampling. Provide a detailed description of methods and sampling locations for the collection of wipe samples. This includes providing a detailed description of the methods, the wipe composition and solvents, quality control samples, and proposed sample locations on the equipment. Revise the text and Tables 2 and 5 accordingly.

12. **Section 6.2.4, Solid Chip Sampling, page 7:**
Provide a detailed written description of the specific methods, and sampling locations proposed to collect the chip samples. Revise the text and Tables 2 and 5 accordingly.

13. **Section 6.3.1.3, Sample Logbook, page 9:**
Revise this section to state any deviations from the proposed sampling procedures as outlined in the closure plan will be recorded in the logbook. (see also Permit Section 11.10.2.14.i)

14. Section 6.3.3, Packaging and Transportation of Samples, page 10:

a. The Permittee proposes that the samples will be maintained at required temperatures in a cooler with ice or ice gel. Revise this section to include the methods that will be used to demonstrate that appropriate temperatures were maintained throughout the collection and shipping process (*e.g.*, temperature indicator strips, temperature blanks). Revise the text and Table 6.0 accordingly.

b. The Permittee proposes that off-site transportation of samples will occur via contract, common motor carrier, air carrier or freight. Revise this section to specify that the samples will be shipped for overnight delivery to the contract laboratory.

15. Section 7.0 Waste Management, page 12:
Provide a detailed description of methods the Permittee will use to control, handle, and characterize (*e.g.*, instruments, test methods) the different waste types listed in Table 3 of this document. Revise the text and Table 3 accordingly.

16. Table 2, Hazardous Waste Constituents of Concern, page 16:

a. Provide the rational for including or excluding volatile organic compounds (VOCs) in the list of proposed analytical testing in Tables 4, and 5.

b. List kerosene as a constituent of concern, and include diesel-range organics (DRO) listed in the testing procedures located in Table 4 or provide justification for not testing for DRO.

c. Revise Table 2 to include nitrates under Other Constituents of Concern.

17. Table 3, Potential Waste Materials, Waste Types and Disposal Options, page 17:
Revise the table to accurately describe the methods used to treat waste generated during closure (*i.e.*, metal covers/trays will be treated by flashing to remove any HE residues). Revise the potential waste type descriptions to remove the term "non-regulated". Firebrick is not listed as a material that will be sampled. Either remove the listing of firebrick from Table 3 and provide justification in the text or include fire brick sampling in Section 6.2.4.

18. Table 4, Summary of Analytical Methods, page 19:
The list of analytes in Table 4 are inconsistent with the constituents listed in Table 2 (page 16) Constituents of Concern. Revise Tables 2, 4 and 5 and the text to propose analysis for high explosives, semi-volatile organic compounds, target analyte list metals, perchlorate, dioxins/furans and nitrate, or provide justification for the exclusion of these testing procedures in Table 2. In addition, list the detection limits in the appropriate units and revise the footnotes as necessary.

19. Table 5, Sample Container, Preservation Techniques and Holding Times, page 21:
Revise the table to remove aqueous media sampling since this is not applicable to this unit or justify its use in the rinse water collected during water sampling. Revise the table and text to correspond with the Other Constituents of Concern listed in Tables 2 and 4 (target analyte list metals, perchlorate, dioxins/furans and nitrate).

20. Table 6, Recommended Quality Control Sample Types and Criteria, page 22:
Revise Table 6 to reference the project specific analyses addressing quality control for the Other Constituents of Concern listed in Table 2 and 4.

21. Figure 4, TA 16-399 Soil Sample Locations for Closure of Unit, page 26:

a. Provide supplemental text to the figure describing the rationale for the selected sampling locations (*e.g.,* location of sediment accumulation, air modeling). Some of this information is provided in the cover letter; include the rational for sampling locations in the closure plan.

b. Provide the figure on a larger sized page (11X17). Remove the 100 ft contour line indicated in the legend; this is a discrepancy from the contour lines shown on the map at its current scale.

c. Provide drainage locations, land marks (*i.e.,* Pajarito Plateau), and geographic coordinates for the area.

The Permittees must address all comments in this letter and submit a revised Closure Plan by **December 14, 2012.** As part of the response letter that accompanies the revised Closure Plan, the Permittees must include a table that details where all revisions have been made to the Closure Plan and that cross-references the Department's numbered comments. All submittals (including maps and tables) must be in the form of two paper copies and one electronic copy. In addition, the Permittees must submit a redline-strikeout version that includes all changes and edits to Closure Plan (electronic copy) with the response to this Disapproval.

Please contact Siona Briley of my staff at (505) 476-6049 or Siona.Briley@state.nm.us should you have any questions

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
N. Dhawan, NMED HWB
S. Yanicak, NMED DOE OB, MS J993
T. Skibitski, NMED DOE OB
L. King, EPA 6PD-N
P. Maggiore, DOE LASO, MS A316
C. Rodriguez, DOE-LASO, MS A316
K. Rich, EP-CAP, MS M992

File: LANL, TA-16-399 Closure Plan, 2012
LANL-12-040

New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East Bldg.1
Santa Fe, New Mexico 87505

CERTIFIED MAIL™

7011 3500 0002 1600 9751

016H26523547
$05.750
09/28/2012
Mailed From 87505
US POSTAGE
Hasler

Anthony R. Grieggs, Group Leader
Water Quality & RCRA Group
Los Alamos National Laboratory
P.O.Box 1663, MS ~~M704~~ MS. A150
Los Alamos, New Mexico 87545

10-02-12A06:41 RCVD

NAME Elaine Rice
Z# 113017
DATE 10.2.12

U1201983