

TA14



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Date: September 30, 2010  
Refer To: ENV-RCRA-10-183

Mr. John E. Kieling  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505

Dear Mr. Kieling:

**SUBJECT: RESOURCE CONSERVATION AND RECOVERY ACT INTERIM STATUS UNITS AT LOS ALAMOS NATIONAL LABORATORY**

The purpose of this letter is to communicate planned paths forward for the hazardous waste management units that will continue in interim status in accordance with the requirements of the Resource Conservation and Recovery Act (RCRA) after the issuance of the renewed Los Alamos National Laboratory (LANL) Hazardous Waste Permit. The proposed Permit requires that the National Nuclear Security Administration and Los Alamos National Security, LLC (NNSA/LANS) submit either permit modifications or closure plans for the units that remain in interim status at the time of permit issuance. Rather than address specific questions that may need further conversation, the information provided herein outlines a general path for each these units per discussions with Steve Pullen of your staff. The following table lists the units and their status.

**Hazardous Waste Management Units Continuing in Interim Status**

Unit Description	Type of Unit	Unit Status
Technical Area 14, Building 23 (TA-14-23) Burn Cage	Open Burning	Obtained interim status in 1980 and is not currently in use. The most recent permit application submitted in October 1997.
TA-14-23 Open Detonation Unit	Open Detonation	Obtained interim status in 1980 and is not currently in use. The most recent permit application submitted in October 1997.
TA-36-8 Open Detonation Unit, referred to as "Minie"	Open Detonation	Obtained interim status in 1980 and is currently in use. Most recent permit application submitted in September 1999.
TA-39-6 Open Detonation Unit, referred to as "Point 6"	Open Detonation	Obtained interim status in 1980 and is currently in use. Most recent permit application submitted in February 2000.
TA-39-57 Open Detonation Unit, referred to as "Point 57"	Open Detonation	Obtained interim status in 1980 and is currently not in use. Most recent permit application submitted in October 1997.
TA-54, Area L, Storage Shafts 36 & 37	Other Container Storage	Obtained interim status in 1990 and is currently not in use. Closure plan, closure activities, and closure certification completed and submitted.



TA-54, Area G, Storage Shafts 145 & 146	Other Container Storage	Obtained interim status in 1990 and is currently not in use. Closure plan submitted.
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NNSA/LANS propose to submit a Class 3 permit modification request in accordance with Section 1.4.1 of the proposed Permit for the open detonation (OD) units at TA-36-8 and TA-39-6. Two closure plans will be submitted for the three units at TA-14-23 (Burn Cage and OD units) and the open detonation unit TA-39-57. The TA-54, Area G, Storage Shafts 145 & 146 have a previous closure plan submitted in November 1999 and the TA-54, Area L, Storage Shafts 36 & 37 closure certification report was submitted in October 2006.

### **Permit Modification Requests – Open Detonation Units**

The permit modification requests for the OD units at TA-36-8 and TA-39-6 will contain the following information.

- The introduction section will include a statement and overview of the permit modification request. It will also have a crosswalk table depicting each of the regulatory requirements and the location of the discussion of that topic within the modification request.
- The description of the open detonation unit includes:
  - waste management practices,
  - treatment processes,
  - treatment operating requirements (both procedural and safety required),
  - information on treatment effectiveness, and
  - information on treatment justification of the need for the OD units.
- A discussion on the environmental performance standards required for miscellaneous units encompassing:
  - air pathway assessment and modeling to assess OD air releases and potential human health and ecological risk;
  - baseline characterization, including an assessment of the current level of risk to human health and the environment present at the site from past operations within the area based on environmental media of concern (e.g., protection of groundwater/vadose zone, surfacewater/wetlands, soil surface, and the atmosphere); and
  - a discussion of monitoring and/or modeling conducted for any environmental media discussed.
- Waste characterization information for OD treatment encompassing:
  - changes to waste analysis plan to incorporated the OD units,
  - waste streams accepted for open detonation treatment,
  - waste characterization descriptions, and
  - verification frequencies.
- Waste minimization plan that identifies measures to minimize the input waste streams to the OD units, an accounting of waste treated by the OD units under interim status, future

- estimates of waste, and an alternative assessment to OD for waste streams that are treated at the units.
- Descriptions of controls and procedures for security, access control, and preparedness and hazard prevention containing:
    - the location of required emergency equipment and testing and maintenance equipment, and
    - discussions on preventing hazards during unloading and waste handling.
  - Changes necessary to the contingency, inspection, and personnel training plans of the Permit after it is issued.
  - A discussion of facility requirements including:
    - traffic patterns,
    - location information (i.e., seismic standard, floodplain standard, archeological sites),
    - topographic maps,
    - design and construction of engineered controls,
    - an evaluation of other applicable federal laws, and
    - an evaluation of other permit activities.
  - Information on post-treatment waste management plan, including the management of residue.
  - A plan for noise mitigation and ground vibration considerations.
  - Information on corrective action activities in the area surrounding the unit with a list of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs).
  - A draft closure plan, organized similar to the interim status closure plans discussed below. Care will be taken to ensure consistency with the proposed Permit and remove potential redundancies.

### **Closure Plans**

The draft closure plans will be submitted as interim status closure plans for units at TA-14 and TA-39-57. These closure plans will follow the format as set out in the TA-16 open burning treatment unit closure plans that were public noticed on February 2, 2010. The basic information covered is as follows:

- A description of the unit to be closed, the wastes treated at the unit, the process for waste treatment conducted at the unit, and an estimate of the maximum waste treated at the unit.
- General closure information as outlined in Part 9 of the proposed Permit, such as closure performance standards, schedules, process for amending the closure plans.
  - The process for amending closure plans will include a mechanism to request that closure activities will be finished when operations within the area cease.
- Closure procedures like the timing and requirements of the records review and structural assessment, decontamination and removal of structures and equipment.
- A sampling and analysis plan that will detail sampling activities, collection procedures, sample management procedures, and sample analysis requirements.

- Any soil contamination found within the boundary of the unit during the process of closure activities will be addressed as discussed within the interim status closure plan.
- Waste management procedure descriptions and a list of information to be included within the closure certification report.

Additional discussion points were transmitted to Mark Haagenstad and Luciana Vigil-Holterman of the Water Quality and RCRA Group (ENV-RCRA) on September 28, 2010. These discussion points and a request for a meeting will follow in further communications. The opportunity to present our plans and discuss these with you and your staff is appreciated. If you have questions about these planned actions, please contact Ms. Vigil-Holterman at (505)665-3435.

Sincerely,



Anthony R. Grieggs  
Group Leader  
Water Quality & RCRA Group (ENV-RCRA)

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