

Los Alamos
NATIONAL LABORATORY

Hazardous & Solid Waste, ESH-19
Mail Stop K490
665-9527/Fax 667-5224

Date: February 4, 2002
Refer to: ESH-19:02-008

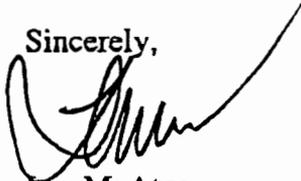
HAND DELIVERED

Ms. Debby Brinkerhoff
Compliance and Technical Assistance Program
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

Dear Ms. Brinkerhoff:

This letter is to transmit the University of California's (UC) and Department of Energy's (DOE) response to the Notice of Violation issued October 9, 2001 by the New Mexico Environment Department. UC/DOE would like to meet with you to discuss the contents of this response (Enclosure A). Alice Barr of my staff will contact you to schedule a time that is convenient. Please feel free to contact her at 667-0820 for any questions you may have regarding these matters.

Sincerely,



Lee McAtee
Acting Division Leader
Environment, Safety, and Health Division

LM/vh

Enc. a/s

Cy: J. Browne, DIR, LANL, A100
J. Salgado, DIR, LANL, A100
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J. Holt, ADO, LANL, A104
E. Louderbough, LC-GL, LANL, A187
C. Cruz, OLASO, A316
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J. Vozella, OLASO, A316
G. Turner, OLASO, A316
IM-5, LANL, A150
ESH-19 File, LANL, K490



15994

Permit
TA-3, -35, -39, 50, 53, 54

ENCLOSURE A
ADDITIONAL INFORMATION REGARDING THE ALLEGED VIOLATIONS,
LANL 2001 RCRA INSPECTION

This enclosure contains information related to the alleged violations identified by the New Mexico Environment Department (NMED) in the October 9, 2001 Notice of Violation (NOV). This NOV was issued as a result of the 2001 Resource Conservation and Recovery Act (RCRA) compliance inspection performed at the Los Alamos National Laboratory (LANL) by NMED from April 23 to the end of August 2001. Each alleged violation is rewritten verbatim and italicized followed by the University of California's (UC) and the Department of Energy's (DOE) response.

1. *LANL failed to perform a hazardous waste determination on;*
 - a. *White powder found at TA-3-40, N16H, Satellite Accumulation Area (SAA), Site ID#1209,*

The small amount of white powder found in the secondary containment tray at this location was thought to have been hard water residue resulting from a leaky sink above the SAA. An x-ray diffraction analysis performed on the powder the day of the NMED inspection confirmed components that had likely originated from plumbing, tap water, and soap. In addition, field screening tools indicated that the material possessed properties of an oxidizer. All of the material was consumed during the characterization efforts.

- b. *Mineral oil found on the south side of TA-35, Bldg. 125,*

The chemical analysis performed indicated that the mineral oil was indeed a petroleum hydrocarbon that was not and did not contain hazardous waste. Results from confirmatory sampling are pending and will be reported to NMED if they cause the characterization to change.

- c. *On waste piles from OB/OD firing sites at TA-39 (39-001 a & b, 39-004 a through e, 39-008),*

The requirement to perform a hazardous waste determination at the locations identified above is dependent upon the presence of a waste pile at the site and, if one does exist, whether it is subject to regulation as an active waste management unit. Each of the sites identified has been re-evaluated following the inspection to determine if a waste pile exists and, if so, to confirm its regulatory status. Based on the photos taken during the inspection and this re-evaluation, no waste piles subject to the regulation cited above were found.

It should be noted that only 2 of the referenced sites are OB/OD units. However, an evaluation of all the TA-39 sites identified above will be included in the Environmental Restoration Program's (ER)/NMED-agreed upon approach contained in the corrective action strategy for the Ancho Canyon Watershed, TA-39 Aggregate. In fact, extensive sampling and analysis throughout TA-39 has already been performed pursuant to the RCRA Facility Investigation (RFI) Workplan. All of the analytical data collected from the above-referenced sites was provided to NMED as requested in its February 12, 2001 Request for Supplemental Information.

The results of each site evaluation are as follows:

TA-39-001(a): No waste pile was found to exist at this site, therefore no hazardous waste determination would have been required;

TA-39-001(b): A roll-off bin used to collect recyclable metal scrap was maintained at the site. According to site personnel, after the bin had been filled and while awaiting pick-up, more recyclable metal was accumulated on the ground adjacent to the bin. Knowledge of the type of metal existed at the time of the inspection and it was known to not be subject to RCRA regulation;

TA-39-004(a): No waste pile was found to exist at this site; therefore, no hazardous waste determination would have been required;

TA-39-004(b): No waste pile was found to exist at this site. However, sand purchased in Los Alamos and used to fill sand bags for firing site use was found to exist in a pile at this location. Knowledge of this sand existed at the time of the inspection and it was known to be usable product;

TA-39-004(c): No waste pile was found to exist at this site; therefore, no hazardous waste determination would have been required;

TA-39-004(d): No waste pile was found to exist at this site; therefore, no hazardous waste determination would have been required;

TA-39-004(e): Soil from the excavation of a fire water line emplaced near the TA-39 entrance was collected adjacent to this firing site. It was intended to be used as clean fill to maintain firing ranges. Knowledge of this soil existed at the time of the inspection and it was thought to be clean, usable material. It has since undergone field screening that indicated no additional sampling and analysis is warranted at this time;

TA-39-008: The mound at this site was the result of an effort to level the area between the cliff face and the nearby buildings. Based on the recollection of a site worker, this occurred prior to 1981 and no additional material was buried

subsequent to that time. Analytical results of samples collected during the implementation of the RFI Workplan also confirmed that radioactive material was contained in the mound. This activity took place prior to the date that would have caused this mound to be subject to regulation as a mixed waste operating unit (1990), so a hazardous waste determination as cited in the NOV would not have been required.

2. LANL exceeded the 55 gallon limit allowed to be stored at or near the point of generation in the SAA found at TA-35 under the stairs on the east end of Bldg. 421. This is a violation of 20.4.1.300 NMAC, which incorporates 40 CFR §262.34 (c) (1).

All of the referenced material at the location identified above did not exceed 55 gallons. However, a determination that the material was intended for disposal had not yet been made, making management of these items as waste unnecessary. At the time of the inspection, this material was in the process of undergoing an evaluation to determine if it could be used elsewhere. Due to some apparent miscommunication, the individual cataloguing these items used Waste Profile Forms to do so even though future disposition of the material had not been confirmed.

It should be noted that all containers of products were stored in good condition, properly labeled and managed.

3. LANL failed to store SAA waste, found at TA-35 east end of Bldg. 421, under the control of the operator of the process generating the waste. This is a violation of 20.4.1.300 NMAC, which incorporates 40 CFR §262.34 (c) (1).

All of the referenced material at the location identified above was maintained in a locked chemical storage cabinet controlled by the owner. As previously indicated however, a determination that this material was intended for disposal had not yet been made, making management as waste unnecessary.

4. LANL stored incompatible wastes (ignitable waste – alcohols, acetones with reactive wastes – phosphoric acid, nitric acid) specifically SAA wastes in the storage cabinets at the east end of TA-35, BLDG 421, and three lab packs; CO1136325 – 1/8/01 with ethanol and HF, CO1137133 – 4/26/01 with acetone and hydrobromic acid, CO1136473 with acetonitrile and sulfuric acid in TA-54 Area L Bldg. 68 & 69 without separating them by means of a dike, berm, wall or

other device. This is a violation of 20.4.1.300. NMAC, which incorporates 40CFR §262.34 (a)(1)(i), which incorporates 40 CFR §265.177.

The referenced containers at TA-35, while not subject to storage as waste, were stored by compatibility group in separate secondary containment trays. Although the cabinets themselves contained items that were not compatible if commingled, the trays prevented mixing of material if a container had broken or leaked. This is consistent with the described intent of the cited regulation: to prevent reactions from the mixing of incompatible wastes by separating or protecting them from each other.

In addition, SAAs are not subject to the <90 day storage requirement that is cited above (40 §265.177).

With regard to the TA-54 "lab packs" identified above, these wastes were stored in buildings that contain lab packs. However, the referenced containers were, in fact, not lab packs but rather single-item containers of process waste. The wastes as generated were neither incompatible with themselves nor with the other containers stored in the area. It should also be noted that, by convention, LANL includes the proper Department of Transportation (DOT) shipping name on RCRA waste. Pursuant to DOT requirements and because the wastes met the DOT definitions of more than one hazard class, they were appropriately labeled with both "Ignitable" and "Corrosive" stickers, potentially contributing to some confusion during the inspection.

5. LANL failed to create or maintain a copy of the Land Disposal Restriction Form for the TA-35 manifest #11037 of 4/16/01, and for the TA-54 manifests; #21092 dated 10-27-00, #21090 dated 11-13-00, #21357 dated 12-13-00, #21091 dated 11-15-00, as required. These are violations of 20.4.1.800 NMAC, which incorporates 40 CFR §268.7(a)(2).

Land Disposal Restriction (LDR) Forms had, in fact, been created for the manifests in question. At the time of the inspection, these LDR Forms were not filed with the manifests. Later that same day, LDR Forms for 2 (#11037 and #21357) of 5 manifests were located and provided to NMED inspectors. NMED indicated at that time that it no longer had concerns with these two manifests/LDR Forms.

The LDR forms for the remaining 3 manifests were not located that day, however, copies of the documents in question were subsequently requested and received from the off-site disposal facilities. These forms had been included in the original shipping documentation that accompanied the waste and copies are currently maintained with their respective manifests at LANL.

6. LANL failed to have the complete information required on the Land Disposal Restriction Forms for the TA-54 manifests;

*#99281 - dated 6/7/99, wrong manifest number on LDR,
#99629 - dated 10/19/99, missing manifest number on LDR,
#99631 - dated 10/27/99, missing manifest number on LDR,
#99630 - dated 10/27/99, missing manifest number on LDR.*

These are violations of 20.4.1.800 NMAC, which incorporates 40 CFR §268.7(a)(2).

All LDR forms cited above have been corrected and filed with their respective manifests both on-site and at the disposal facility that received the waste. While the LDR forms for manifests #99629, #99630, and #99631 were missing the manifest number, it should be noted that these documents were for a single, discrete waste stream that was sent to the same disposal facility on several occasions. Unfortunately, it appears that the original LDR form was missing the manifest number and was copied for use on subsequent shipments, inadvertently repeating the error.

7. LANL failed to make an exception report to the EPA Regional Administrator within 45 days of the date the waste was accepted by the initial transporter for a manifest #99473- dated 10/1/99 found at TA-54 that was missing the date on line 20. This is a violation of 20.4.1.300 which incorporates 40 CFR §262.42 (a)(2).

LANL received a copy of the signed manifest #99473 within 45 days of acceptance of the waste by the initial transporter, therefore no exception report would have been required. While the date on line 20 of the manifest was lacking the year ("10/04/ __"), a note on line 19 written by the receiving facility is dated with the same date and includes the year ("10/04/99"), indicating that it indeed was in possession of the waste on that particular day. LANL also received a certificate of receipt from the disposal facility within less than 45 days of shipping stating that the shipment including the waste in question had been received on 10/04/99 and 10/05/99. Although instructions for completing the manifest include writing the year with the date waste is received, the fact that it was omitted is an issue for the receiving facility rather than LANL. An exception report filed by LANL would not have been necessary for such an omission.

8. LANL failed to fill in the discrepancy line on TA-54 manifest #20801 dated 9/14/00 for removal of wastes from that shipment and made to the manifest after the document was created. This is a violation of 20.4.1.300 and 500 NMAC which incorporates 40 CFR §262.23 and 262 Appendix Item #19, and 40 CFR §264.71(a)(2).

LANL was not required to fill in the discrepancy line (Item #19) due to changes made on the manifest or for removal of wastes from the shipment. In accordance with the instructions for completing manifests, the discrepancy line is intended for use by the receiving facility in the event that the waste described on the manifest does not match the waste received. No such discrepancy occurred and, consequently, the receiving facility described nothing in Item #19.

9. LANL failed to;

- a. take corrective action as necessary to protect human health from releases of hazardous waste from the waste piles at TA-39 (39-004 c, 39-008 and 39-010). This is a violation of 20.4.1.500 or 20.4.1.600 NMAC, which incorporates 40 CFR §264.101 or 265.101, or

Actions had been taken prior to the NMED inspection at all three of these sites to ensure human health is protected from releases of hazardous waste. As required by LANL's storm water permit, movement of contaminants from solid waste management units (SWMU) that have the potential to impact surface water is to be controlled by maintaining Best Management Practices (BMPs). LANL and DOE have been working with NMED's Surface Water Quality Bureau (SWQB) for several years to ensure that appropriate BMPs are identified, implemented and maintained at TA-39, regardless of whether a site is defined as a SWMU. A Surface Water Assessment Team (SWAT) was formed, consisting of SWQB, LANL, and DOE personnel, to assess these activities. The process utilized by the SWAT (and agreed to by NMED's Hazardous Waste Bureau) to ensure adequate storm water control is triggered by a determination that erosion potential is greater than "low".

Erosion matrix scores derived from ER's Standard Operating Procedure 2.01, "Surface Water Site Assessments" were calculated for each site to assist in determining what controls would be necessary. BMPs were implemented as appropriate at TA-39 sites with concurrence from the SWAT.

To ensure these controls were sufficiently protective, they were recently re-evaluated and, if appropriate, maintained and/or enhanced. In addition, LANL has increased the frequency that they are inspected from annually to quarterly. Monitoring runoff from SWMUs also occurs pursuant to the storm water permit. Because RCRA precludes duplicative enforcement when another Act is protective

and controls compliance, and as LANL is compliant with this permit, actions beyond those already taken do not seem warranted.

TA-39-004(c): No waste pile was observed at this location. However, it should be noted that storm water BMP controls were put in place with the approval of the SWAT. The adequacy of these controls was recently re-evaluated and, if appropriate, maintained and/or enhanced. As previously mentioned, additional evaluation of this site will occur and the results will be included in the forthcoming watershed studies.

TA-39-008: The potential for erosion at this site has been calculated and was determined to be in the "low" range. The area is very flat, exhibits heavy vegetative cover, and appears to be very well stabilized. This site was recently re-evaluated to ensure adequate storm water control existed. As previously mentioned, additional evaluation of this site will occur and the results will be included in the forthcoming watershed studies.

TA-39-010: The potential for erosion at this site has been calculated and was determined to be in the "low" range. The area is relatively flat, exhibits heavy vegetative cover and appears to be very well stabilized. This site was recently re-evaluated to ensure adequate storm water control existed. As previously mentioned, additional evaluation of this site will occur and the results will be included in the forthcoming watershed studies.

b. analyze the waste piles found at TA-39 (39-004 c, 39-008 and 30-010). This is a violation of 20.4.1.600 NMAC, which incorporates 40 CFR §265.252,

TA-39-004(c): As previously mentioned, no waste pile subject to the above-cited regulation was found at this site and no analysis would be required.

TA-39-008: As discussed in the response to alleged violation 1.c, the soil was mounded at its present location prior to the date that would have caused it to be subject to regulation as an operating unit. The requirement to analyze the mound as cited in the NOV would not apply, however, analytical data from previous sampling efforts has been provided to NMED in a March 15, 2001 data submittal. Additional evaluation will occur and the results will be included in the forthcoming watershed studies.

TA-39-010: Movement of the soil now located at this site occurred prior to the date that would have caused it to be subject to regulation as an operating unit. The requirement to analyze as cited in the NOV would not apply, however,

further evaluation will occur and the results will be included in the forthcoming watershed studies.

- c. manage the waste piles at TA-39 (39-004 c, 39-008, and 39-010) to meet the regulations of Subpart L – Waste Piles. This is a violation of 20.4.1.600 NMAC, which incorporates 40 CFR §265.250 to 260.*

TA-39-004(c): No waste pile subject to the above-cited regulation was found at the site and compliance with the requirements for management under Subpart L – Waste Piles would not be necessary.

TA-39-008: As provided above, the soil was mounded at its present location prior to the date that would have caused it to be subject to the Subpart L requirements.

TA-39-010: As provided above, the soil was moved to its present location prior to the date that would have caused it to be subject to Subpart L requirements.

10. LANL failed to manage TA-39-004(c) to prevent any release that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, or wetlands or on the soil surface. This is a violation of 20.4.1.500 NMAC, which incorporates 40 CFR §264.601(b).

The firing site referenced above has not yet received an operating permit and as such, is not subject to the regulation cited above. It should be noted, however, that all firing sites identified in this NOV have been re-evaluated to ensure runoff is adequately controlled.

11. LANL failed to provide a written description of type and amount of training provided to each position at TA-50. This is a violation of 20.4.1.500 and 600 NMAC, which incorporates 40 CFR §264.16(d) or 265.16(d).

The written description of type and amount of training for the positions subject to these requirements has been included in Attachment C of LANL's Hazardous Waste Permit since it was issued (utilized by both permitted and interim status unit operators), as well as TA-50's specific training plan. The cited requirements are only applicable to positions "related to hazardous waste management" and do not apply to all positions at TA-50.

12. LANL failed to provide an annual review of the initial training for Ed Freer at TA-50 from 12/17/99 to 2/17/00. This is a violation of 20.4.1.500 and 600 NMAC, which incorporates 40 CFR §264.16(c) or 265.16(c).

The provision for an annual review of initial training was available during the referenced time frame. Unfortunately, tracking of training in 1999 had not yet been fully automated to provide daily reports, contributing, in part, to the problem. As a consequence, missed training might not be determined until the subsequent month's manual records review.

Since that time, TA-50 has developed and is currently implementing a fully automated training database system. This system conducts a daily check of the training records in the Employee Development System database at LANL's facility training center for all TA-50 personnel. The database can generate reports that list TA-50 personnel, the training required, and the date when training expires. TA-50 training specialists schedule the necessary training a minimum of 30 days (often 60 days) prior to the expiration of training and send the employee e-mail notification of the date of the training for which they are to attend. Reminders are also sent one month, one week and one day prior to the scheduled training. Managers/supervisors are notified weekly of their personnel scheduled and, if training is missed, of the delinquency of the training.

13. LANL failed to keep the contingency plan current at TA-50. It did not describe arrangements made with the police, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services. This is a violation of 20.4.1.500 and 600 NMAC, which incorporates 40 CFR §264.52(c) or 265.52(c).

Required arrangements with emergency services existed at the time of the inspection and are included in the facility's RCRA contingency plan. The plan is approved as a part of LANL's facility permit and meets the requirements of the above-cited regulations. While several TAs at LANL have prepared site-specific emergency action plans as a good management practice, a contingency plan for each TA is not required.

14. LANL failed to list in TA-50 or amend the list in TA-53, Bldg. 1180 with the names, addresses and phone numbers of the emergency coordinator(s) as required. This is a violation of 20.4.1.500 and 600 NMAC, which incorporates 40 CFR §264.55 or 265.55.

The facility's RCRA contingency plan as approved in LANL's permit contains the necessary and NMED agreed-upon information regarding emergency

coordinators. As previously mentioned, several site-specific emergency action plans have been developed, but a contingency plan for each TA is not required.

15. LANL failed to list the actions facility personnel must take to comply with fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface waste at the TA-50. This is a violation of 20.4.1.500 and 600 NMAC, which incorporates 40 CFR §264.55 or 265.55.

The facility's RCRA contingency plan as approved in LANL's permit contains the necessary and NMED agreed-upon actions to address the situations listed above. In addition, the site-specific emergency action plan for TA-50 does contain a list of actions to follow in the event of such emergencies, although it is not required to do so.

16. LANL has failed to adequately track the TA-50 and TA-54-68 Area L interim storage mixed waste added to the Site Treatment Plan (STP) per the requirements of the FFCA-1992, sec. 3021 and the FFCO - Part VII, 5/16/97. It is not possible using the existing recordkeeping system to tell if individual drums of mixed waste have or have not been added to the STP.

All mixed waste at TA-54 is tracked and, pursuant to the NMED-agreed upon approach, updated into LANL's STP database annually. The drum that LANL believes NMED was concerned with during the inspection was not included in this STP database because it was not mixed waste.

It should be noted that the accumulation start date on this drum was identified by the generator's Waste Management Coordinator as incorrect prior to the inspection. A typographical error was then made in attempting to correct the date that was placed on the drum's label. Although this error was not identified until NMED's inspection, the period of time from the actual accumulation start date to the final disposition of the waste off-site was less than one year and therefore compliant with the LDR storage prohibition.

With regard to STP wastes not stored at TA-54 (e.g., TA-50), the procedure typically used to track waste in the STP database includes notification provided to the STP manager. This did not occur for the waste identified at TA-50 within the necessary timeframe. It is, however, currently tracked in LANL's STP database. An effort is currently ongoing to ensure timeliness of STP waste tracking.

Although tracking of individual waste drums is not required in the FFCO, it is possible to determine if an individual drum has or has not been added to the STP database because it includes a detailed inventory of all drums added.

17. LANL failed to test/maintain decontamination (eye wash) equipment at TA-53, ID #2116. The seals had failed and would not hold water. This is a violation of 20.4.1.500 or 600 NMAC, which incorporates 40 CFR §264.33 or 265.33.

LANL did not fail to test the eyewash in question. It was inspected pursuant to LANL's inspection plan schedule on a weekly basis. It was found to be functional within the week of and prior to the NMED inspection. Following the NMED inspection, the eyewash was pressurized again. The seals did not fail immediately, but when rechecked 2 days after pressurization, were found to have failed. While awaiting arrival of a new eyewash ordered immediately thereafter, the existing eye wash was kept functional by pressurizing every other day.

18. LANL failed to maintain an emergency phone at the TA-54-39 storage facility. This is a violation of 20.4.1.500 or 600 NMAC, which incorporates 40 CFR §264.32(b) or 265.32(b).

During the inspection, it was noted that an office telephone in the building was not operational. It was pointed out to the NMED inspector that this telephone was not part of the facility's emergency communication system. The inspector was then shown that an emergency telephone does in fact exist approximately 36 feet west of TA-54-39. LANL believes this meets the intent of the regulation by providing a device at the scene capable of summoning emergency assistance.