

2055
Permit

12-15-93

RESPONSE TO COMMENTS
ON EPA DRAFTED HSWA
PERMIT - MODULE VIII
OF RCRA PERMIT FOR
LOS ALAMOS NATIONAL LABORATORY
CLASS III PERMIT MODIFICATION
NM0890010515

I. BACKGROUND INFORMATION

1. Facility location: Los Alamos National Laboratory (LANL) is located next to the town of Los Alamos, New Mexico which is approximately 35 miles northwest of Santa Fe, New Mexico.

2. Facility Activities and Waste Handling: LANL is administered for the Department of Energy (DOE) by the University of California (UC). Historically, the principal mission of LANL has been the design, development and testing of weapons for the nation's nuclear arsenal. This effort is supported by research programs in nuclear physics, hydrodynamic, conventional explosives, chemistry, metallurgy, radiochemistry and biology. LANL has been issued a State RCRA permit for an incinerator, container storage, and tank storage.

3. Public Notice: Los Alamos National Laboratory public noticed the start of the 60-day comment period on March 23, 1993. They held two public hearings on the permit modification, one on April 19, 1993 in Santa Fe, New Mexico and one on April 26 in Los Alamos, New Mexico. The public comment period ended on May 24, 1993, and no comments were received. EPA public noticed the draft permit and beginning of our forty-five (45) day comment period on September 8, 1993. The comment period ended on October 25, 1993. LANL requested an extension of the public comment period. A thirty day extension of the comment period was given. The comment period was public noticed on November 11 and 12, 1993 and the comment period ended on December 15, 1993. Comments on the permit modification were only received from LANL.

II. CHANGES MADE IN FINALIZING THE EPA PERMIT

Below are the changes which EPA made to the Los Alamos National Laboratory (LANL) Hazardous and Solid Waste Amendment (HSWA) permit. Language was added or modified as a result of a Class III permit modification requested by LANL.

1. Page 11, paragraph one, line 5: A new sentence was included: Some generic aspects of the RFI Operable Unit (OU) Specific Workplans (Task II) will be incorporated into the Installation Workplans as appropriate, and not repeated in the OU Workplans.



2. Page 12, paragraph one, line 4: Change the date from September 1 to November 19. The new sentence now reads, "The draft LANL installation RI/FS workplan shall be submitted to the Administrative Authority by November 19 of the year."

3. Page 12, a new section was added: This language is the current dispute resolution language which is used in all HSWA permits issued by EPA. The language has changed from that noticed in the draft permit, however this change has been made in order to be consistent with other permits.

E. DISPUTE RESOLUTION

1. The parties shall use their best efforts to informally and in good faith resolve all disputes or differences of opinion. If, however, disputes arise concerning the corrective action which the parties are unable to resolve informally, the following procedures shall apply. If Permittee's dispute concerns its inability to meet a specified deadline, then Permittee is obligated to raise the issue at least 30 days in advance of the deadline.

2. EPA shall provide Permittee written notice of its disapproval or modification of any interim submission including, but not limited to, implementation of workplans, approval of documents, scheduling of any work, or selection, performance, or completion of any correction action. The written notice of disapproval shall set forth the reasons for the disapproval or modification. If the Permittee disagrees, in whole or in part, with any such written notice, the Permittee shall notify the RCRA Permits Branch Chief, in writing, within 10 days of receipt of the written notice. The Permittee and the RCRA Permits Branch staff shall use their best efforts to informally and in good faith resolve the dispute. The Permittee is entitled to meet with RCRA Permits Branch staff in person at the Region 6 offices or by teleconference, if it so desires, in order to resolve the dispute.

3. If Permittee and the RCRA Permits Branch staff are unable to resolve the dispute, the Permittee may request a final decision by the Hazardous Waste Division Director (the official who has delegated authority to make final decisions on the permit). Within 30 days of its receipt of EPA's written notice, the Permittee shall submit to the Hazardous Waste Division Director a written statement of its arguments and explanations of its position. The written statement should include, at a minimum, the specific points of dispute, the position the Permittee maintains should be adopted as consistent with the Permit requirements and the basis therefore, any matters which it considers necessary for proper determination of the dispute, and whether the Permittee

requests an informal conference in front of the Hazardous Waste Management Division Director. The Permittee's failure to follow the procedures set forth in this paragraph will constitute a waiver of its right to further consideration of the dispute.

4. EPA, at its discretion, will determine whether an informal conference, if requested by the Permittee, will be held.

5. The Hazardous Waste Management Division Director shall consider the written position of the Permittee and the oral arguments, if an informal conference is convened, and shall provide a written statement of his decision based on the record, which statement shall be considered to be incorporated as an enforceable part of the permit. The written statement shall respond to the Permittee's arguments and shall set forth the reasons for the EPA's final decision. Such decision shall be the final resolution of the dispute and shall be implemented immediately by the Permittee according to the schedule contained therein. Such decision does not constitute final agency action for the purposes of judicial review.

6. Notwithstanding the invocation of this dispute resolution procedure, the Permittee shall proceed to take any action required by those portions of the submission and of the permit that EPA determines are not substantially affected by the dispute.

4. Page 51, paragraph four, line 1: EPA deleted "and one compatible disk copy", so that only two hard copies of all reports are required to be submitted to the Administrative Authority.

5. In February 1993, LANL requested the addition of 483 SWMUs in a Class III permit modification. Upon review of several work plans, EPA realized that some of the SWMUs that LANL had requested to be added to the HSWA permit also had been recommended for no further action in several RFI work plans. LANL submitted comments in December 1993, requesting that 42 of the SWMUs originally requested to be added to the permit not be added. EPA agreed that all but five (5) of the 42 SWMUs did not need to be added to the permit (see Response to Comments 7, 8, 9, 10 and 20). LANL also requested in their December 1993, comments, the addition of another 64 SWMUs to the HSWA permit which EPA has included in Table A.

EPA has renumbered all the SWMUs to match the 1990 Department of Energy Report as indicated in language changes to page 17, paragraph one, line 10 of the permit. In addition, upon review of several workplans, EPA has determined that five additional SWMUs need to be added to the permit. The units added are C-8-010, C-9-001, 39-004(a), 39-004(b) and 39-008. With the addition of all the new SWMUs, and renumbering of all the SWMUs to match the 1990 DOE Report, there are now a total of 1076 SWMUs that are required to be

investigated pursuant to 3004 (u) and 3004 (v) (for differences between Table A as proposed by LANL and the final Table A see response to comments #47).

6. Because LANL has increased the number of SWMUs to be investigated under the HSWA portion of the RCRA permit, EPA has revised the RFI Work Plan submittal dates for those SWMUs listed in Table C. There are 81 SWMUs in column one of Table C, and the RFI work plan to address these units is due on July 7, 1994. Column two of Table C contains 51 SWMUs for which an RFI work plan is due July 7, 1995. Language was added indicating this schedule change in the permit under Part I, Section 3 (f and g), RFI Schedule of Submittals.

7. A staggered schedule for submitting the third group of RFI Workplans required under Part I, Section 3 (c) is listed in Table D.

8. Page 16, paragraph 2, line 3: The amount of time the Permittee is allowed to respond to deficiencies in their workplans has been changed to being subject to the time frame specified by the Administrative Authority, rather than to thirty (30) days. This change was also made in the permit on page 26, paragraph 2, line 3 which also refers to the period of time the Permittee has to respond to any deficiencies noted by the Administrative Authority.

9. EPA has changed all references to the New Mexico Environmental Improvement Division to the New Mexico Environment Department (see definition "Administrative Authority" and Part B.5.b of the permit).

10. EPA has deleted from the permit all the references "or the equivalent thereof" or "OTET", as EPA believes this phrase is not necessary in the permit.

11. With the addition of Section E, Dispute Resolution, portions of the permit which referenced other sections of the permit needed to be revised (e.g. page 10, in the third paragraph the permit refers to Condition P which is now Condition Q due to a relettering of the permit). EPA has made the appropriate changes in the permit.

III. RESPONSE TO COMMENTS

Following are the response to comments made during the public comment periods.

1. Los Alamos National Laboratory submitted several comments on typographical errors in Module VIII of the Resource Conservation and Recovery Act (RCRA). Following are the changes that were made in response to the comments:

<u>PAGE</u>	<u>PARAGRAPH</u>	<u>LINE</u>	<u>SUGGESTED CORRECTION</u>
5	11	3	LAO-S is LAO-5
8	2	1	Delete extra space before "Protection"
12	1	1	Insert a period after "incorporated"
13	2	2	"i.e." change to "e.g."
14	10	7	"that" change to "than"
15	2	7	"LANI" change to "LANL"
16	5	2	After "outline" change to i
17	1	7	"SWMU's" change to "SWMUs"
17	1	9	"SWMU's" change to "SWMUs" twice
33	6,7	2,2	Align column
44	5	4	"C" in "which" - change to "c"
44	5	5	"i.e." change to "e.g"
44	10	4	"S" in repreSentative to "s" "P" in descriPtion to "p"
45	2	1	"U" in distribUtion to "u"
46	2	3	Comma after "floodplains"
47	1	1	"G" in Groundwater to "g" "I" in Investigation to "i"
49	1	8	Change "n" to "r" in detenmination
49	5	4	Delete comma and "etc" after "standards"
50	3	2	Delete capital letters from "representatives"
50	8	2	Delete capital letter from "which"
52	1	1	Delete capital letter from "purpose"
54	2	8	Delete capital letter from "purpose"
54	4	7	Delete capital letter from "past"
54	5	1	Delete capital letter from "perform"
55	3	7	Delete capital letters from "initial"
56	3	2	Delete capital letters from "initial screening"
56	3	3	Change "it's" to "its"
56	4	5	Insert period after "required"
57	2	13	Insert period after "project". Delete capital letter from "way"
58	1	6	Change "i.e." to "e.g."
62	16	1	Delete capital letters from "implementation precautions"

2. DOE Comment: typographical errors

<u>PAGE</u>	<u>PARAGRAPH</u>	<u>LINE</u>	<u>SUGGESTED CORRECTION</u>
2	2	4	Delete - insert semicolon

EPA Response: EPA inserted a comma instead.

3. DOE Comment: typographical errors

<u>PAGE</u>	<u>PARAGRAPH</u>	<u>LINE</u>	<u>SUGGESTED CORRECTION</u>
26	5	1	Before a, add "i"
26	6	1	Before b, add "ii"
26	7	1	Before c, add "iii"
27	1	1	Before k, add "iv"

EPA Response: EPA decided to break this portion of the permit into sections as it was previously difficult to follow. The following changes were made:

1) On page 16, Part I, Section 3 was retitled "RFI Work Plan: Schedule of Submittals";

2) On page 26, a new section was created beginning with the first paragraph "After the Permittee submits...". This section is now Part I, Section 4, "RFI Work Plan and Reports (Submittal and Preparation)". By creating this section the subscripts used (a through d) are correct and the text is easier to follow;

3) On page 27, the last paragraph which starts with "The Permittee shall submit..." has been made into Section 5, "Canyon Systems, RFI Work Plan".

4. DOE Comment: typographical errors

<u>PAGE</u>	<u>PARAGRAPH</u>	<u>LINE</u>	<u>SUGGESTED CORRECTION</u>
32	2	1	Before i, add "1"
32	3	1	Before ii, add "2"

EPA Response: No change was made in the permit as the outline sequence used was correct.

5. DOE Comment: SWMU 0-008 - Site recommended for NFA in the RFI Work Plan for OU-1071. The Work Plan has been approved by EPA.

EPA Response: EPA has examined the information on this unit and agrees that it does not need to be added to the permit.

6. DOE Comment: SWMU 0-011(b) - Site was listed in the 1990 SWMU Report as different than site 0-011(e), "37-mm Canyon". Subsequent archival searches documented that site 0-011(e) was actually the same as site 0-011(b). The duplicate designation 0-011(b) was dropped.

EPA Response: EPA agrees with the comment. DOE should submit all information related to the investigation of this area under SWMU 0-011(e).

7. DOE Comment: SWMU 1-001(o) - This sanitary waste line has been removed. This line served the former J and ML Buildings, and discharged directly into Bailey's Canyon. Radioactivity monitoring in 1959 reported alpha activities of 500-4000 counts/minute. Although the line was reported removed in 1959, part of the line was discovered in MDA G. Sampling below the outfall area in 1992 will support a proposal for NFA in the first Phase Report (early 1994).

EPA Comment: This site has already been investigated under Operable Unit 1078 which was an approved work plan. Until EPA can review the data supporting the request for NFA, the SWMU will remain in the permit.

8. DOE Comment: SWMU 1-003(d) - The can dump site contains empty solvent paint cans, most likely discarded from Zia warehouses prior to 1960. Soil samples were collected in 1992, and will support a proposal for NFA in the first Phase Report (early 1994).

EPA Response: Until EPA can review the sampling data from 1992, the site will remain in the permit.

9. DOE Comment: SWMU 1-003(e) - The SE Los Alamos Inn debris site is along the northern wall of Los Alamos Canyon. Objects observed at the site include utility boxes, concrete construction debris, and piping. It probably received debris during the 1953-1959 demolition of the buildings in the eastern part of TA-1. Soil samples were collected in 1992, and will support a proposal for NFA in the first Phase Report (early 1994).

EPA Response: Refer to response # 8.

10. DOE Comment: SWMU 1-006(a) - The cooling tower 80 drain line and outfall area may have released chromium based biocides. A soil sample from this site in 1987 indicated no metal, organic compound or radionuclide above background. Soil samples were collected in 1992, and will support a proposal for NFA in the first Phase Report (early in 1994).

EPA Response: Refer to response #8.

11. DOE Comment: SWMU 2-001 - This unit may have consisted of a former burner pit for disposal of combustible materials from TA-2 (LANL 1990, 0145). A 1945 memorandum recommended that drums be provided at the burning pit for trash that could not be burned. Archival research shows that the past location of the site is unknown. In addition, in an interview, Glen Neely (an employee of TA-2 from 1960 to 1976) stated that he and his co-workers do not

know the location of the site, and cannot confirm that the site ever existed.

EPA Response: EPA agrees that this unit need not be added to the permit.

12. DOE Comment: 3-013(c) - This was a cable cleaning site, now removed. From the 1960s until 1991, new steel cable received by the Laboratory was soaked in a kerosene bath to remove factory applied preservatives (petroleum-based paraffins and greases). This cleaning operation was performed on a paved asphalt area located approximately 200 ft west of TA-3-38 in the Johnson controls storage yard. Runoff flows south to a storm drain about 200 ft south of the pad [see SWMU 3-013(a) for a description of the drain].

For cable-cleaning operations, a 10 x 20 ft, 4-in.-deep bed of sand, underlain by plastic and surrounded by a one-foot-high sand berm, was built in the middle of the asphalt pad. A 1200-gal. tank containing kerosene was located on the sand bed and the new cables were placed in the tank to soak. Kerosene frequently spilled from the tank onto the sand bed. Cleaned cables were suspended above the tank for a period of time to allow residue to drain. The cables were then placed in wooden shipping boxes next to the tank but outside the sand berm where some remaining kerosene evaporated or dripped onto the asphalt surrounding the tank.

The sand bed and plastic liner were removed after each cable-cleaning operation and discarded at the Los Alamos municipal landfill. Kerosene remaining in the tank was recycled. In 1991, this operation, including the tank, was moved to TA-60. The area was swept clean and all sand was disposed of in the municipal landfill (LANL 1992, 17-739). There are some small (1- to 6-in. diameter) oil stains on the asphalt in or near the area, but no evidence that any significant releases occurred. No TCL materials, such as solvents, were involved in this operation.

EPA Response: EPA concurs that this site does not need to be added to the HSWA portion of the RCRA permit.

13. DOE Comment: SWMU 3-013(e) - This is the site of a one-time antifreeze spill in the fenced, paved, storage yard west of the service station, TA-3-36. The service station and yard are in active service. In March 1989 an estimated 60 gal. of a 50/50 mix of ethylene glycol (antifreeze) and water spilled to an area about 8 ft. square on the asphalt pavement west of TA-3-36. Most of the solution drained into a storm drain about 60 ft to the south of the spill area. There were no standing pools of the fluid, nor are there any sediment pockets in the area. The constituents, ethylene glycol and water, are not TCL materials. This PRS has been recommended for NFA in work plan for OU 1114 and approved by EPA.

EPA Response: EPA concurs that this site does not need to be added to the permit.

14. DOE Comment: SWMU 3-013(g) - The SWMU is the site of a dumpster that was located in an unpaved parking area at the northeast corner of the High Voltage Test facility, TA-3-3161. The dumpster has been removed and the area was subsequently paved.

For at least ten years (1978 to 1988), the dumpster was used for disposal of oil-soaked Sorb-all. Spills occurred during disposal of the Sorb-all and oil stains were evident on the soil (LANL 1990, 0145). Between 1988 and 1990 the dumpster was removed as part of the construction of buildings TA-3-2003 through TA-3-2010, located just east of TA-3-316. During this project, the area was graded, leveled, and paved. The stained soil was either excavated and removed or paved over. Although there were a number of capacitor banks and power supplies in TA-3-316, testing of the oil has shown that few of the power supplies and none of the capacitors contained PCBs. The probability of PCB contamination in any of the oil that escaped the dumpster is low (LANL 1992, 17-736). The oils were petroleum-based and not regulated as TCL constituents. This PRS has been recommended for NFA in work plan for OU 1114 and approved by EPA.

EPA Response: EPA agrees that this unit does not need to be added to the permit.

15. DOE Comment: SWMU 3-020(b) - The site was a pit, now covered, adjacent to the southeast corner of TA-3-70 that was used to catch residue from steam-cleaning small engines. The pit was a 1-in deep metal box about 10 x 15 ft that was recessed into asphalt paving. It was filled with sand and covered with a metal grate. Small engines were placed on the grate to be steam cleaned. Oil and grease from the engines, as well as the condensed water and detergent from the steam cleaner, drained into the pit and were absorbed into the sand. As the sand became saturated, it was removed and discarded at the municipal landfill. The pit was refilled with dry sand. In November 1991, the pit was cleaned, refilled with dry sand, and covered with 4 in. of asphalt as part of a general repaving of the lot. This PRS has been recommended for NFA in work plan for OU 1114 and approved by EPA.

EPA Response: EPA agrees that this unit does not need to be added to the permit.

16. DOE Comment: SWMU 5-006(a) - This area is the former site of building TA-5-1. TA-5-1 was a trim shack transferred from TA-18 around 1948 or 1949 to be used as office and lab space. The building was found to be contaminated with HE (high explosives) during a survey in 1959. The site was monitored in 1973 and found to be free of detectable radioactive contamination. The building had been destroyed prior to the LASCP in 1985, when the site was

reclaimed. TA-5-1 was monitored with a Harshaw Model 301 phoswich and no contamination was detected in 1985. There are no documented releases of HE to the environment at TA-5-1. Soil has been moved from TA-5-1 to fill excavations at TA-5-9 and TA-5-15. Due to the lack of archival evidence of releases of RCRA hazardous wastes or radioactive wastes to the environment, this site is recommended for NFA.

EPA Response: High explosive (HE) waste normally would have the characteristic of ignitability (40 CFR Subpart C §261.21) and therefore is regulated by RCRA as a hazardous waste. Because the site no longer exists, EPA concurs that this site does not need to be added to the permit.

17. DOE Comment: SWMU 5-006(d) - This area was the site of a laboratory (TA-5-6) built in 1944. The building was found to be free of radioactive contamination in 1959 and of toxic materials, but was found to be contaminated with HE and was burned. Surface debris was removed and the site was recontoured to existing terrain in 1985. Due to the lack of archival evidence of releases of RCRA hazardous wastes or radioactive wastes to the environment, this site is recommended for NFA.

EPA Response: Same initial response as #16 concerning the RCRA status of HE waste. EPA concurs that this site does not need to be added to the HSWA permit.

18. DOE Comment: SWMU 5-006 (f-g) - These SWMUs are the sites of magazines TA-5-2 and TA-5-3. The buildings were built in 1945, and because they were found to be contaminated with HE were burned in 1960. Miscellaneous building debris was removed during the D&D efforts of the LASCP in 1985 and no radioactive contamination was found in the area. After the area was scanned using portable instruments, samples were collected and depleted uranium was not found. Soil from TA-5-3 was then used to backfill the areas of TA-5-5, -7, -9, and -15. Soil from TA-5-2 was used to backfill TA-5-7, -9 and -15. After the areas were cleared of debris, they were contoured to existing terrain and reclaimed. Due to the lack of archival evidence of releases of RCRA hazardous wastes or radioactive wastes to the environment, this site is recommended for NFA.

EPA Response: See response #16.

19. DOE Comment: SWMU 8-009(b) - Building TA-8-70 was built in 1960 and houses a tomographic system with an attached x-ray unit and a small machine shop (LANL 1944 to present, 12-0003; Harris 1993, 12-0097). Tomography is used to make x-ray pictures of a predetermined plane section of a solid object by blurring out the images of other planes. Water is used to cool an oil chiller which, in turn, cools the x-ray head of the instrument. The water does not come into contact with any material inside the equipment.

This noncontact cooling water is discharged into Pajarito Canyon through EPA-permitted outfall 04A NPDES No. 115-076. The nature of the operations performed in this building has not changed over the years and does not result in the production of hazardous waste (Harris 1993, 12-0097). There are no records of spills or other sources of contamination that could have reached the outfall.

EPA Response: This unit will not be added to the HSWA portion of the permit.

20. DOE Comment: SWMU 15-004(i) - A single report (Linschita 1994, 0790) has been located that states that two test blasts were conducted in 1994 in "The Gulch," approximately 1 mile below R-site at an unknown precise location. Because the location of the site is ill defined and only two tests were performed we recommend NFA.

EPA Response: EPA looked up this SWMU in the RFI Work Plan for OU 1086. The dates should be 1944 instead of 1994. LANL needs to provide a better explanation for deletion of this unit. What type of tests might have been conducted, and did LANL conduct a field search looking for the site? The unit will remain in the permit until more information is provided.

21. DOE Comment: SWMU 15-009(d) - This site is a drain, on the north side of building R-40, that drains part of R-40 which contains offices only (and axillary rooms, such as conference rooms, coffee rooms etc.). There have never been any laboratories associated with this part of R-40 and therefore no hazardous wastes. We recommend NFA.

EPA Response: This site will not be added to the HSWA portion of the RCRA permit.

22. DOE Comment: SWMU 15-014(c) - The site is a sink drain existing in building TA-15-242 at the rear, and emptying on the ground on the north side of the building. Building TA-15-242 is used to store HEs and to assemble HEs around the experimental firing system. No machining of HEs, however, occurs in this building and the HEs are never in solution, making spills unlikely. The sink, now deactivated was used for simple operations such as washing hands. Because no measurable quantities of HEs are expected in this drain area, this PRS is recommended for NFA.

EPA Response: EPA agrees that this unit does not need to be added to the permit.

23. DOE Comment: 15-014(d) - The SWMU report of 1990 (LANL 1990, 0145) states that the use and composition of drainline material of this outfall or drainline from building TA-15-185 is unknown. Presumably the drainline has been in use since 1961 when this building was constructed; it drains surface water into Water Canyon. The unit, 15-014(i), is at the base of the cooling tower.

No additives, including herbicides, were added to the cooling water. Water was taken directly from the main supply. Unit 15-014(d) is slightly farther from the buildings and will receive the same surface water as 15-014(i). The two units can therefore be considered together. The surface runoff and cooling water exiting these drains will be the same, neither with any obvious paths for the introduction of contaminants. We recommend NFA.

EPA Response: EPA agrees that this unit does not need to be added to the permit.

24. DOE Comment: SWMU 15-014(e) - This outfall is a yard drain located approximately 10 ft south and 6 ft east of the southeast corner of building TA-15-184 (PHERMEX facility) (Francis 1992, 10-002). The influent is once-through cooling water and washdrains into floor drains. It is connected to the basement floor drains of building TA-15-184 by a 6-in. vitrified clay pipe. The yard drain (permitted outfall EPA 04-A139) is connected by a 12-in. corrugated metal pipe to a ditch that drains generally southward into Water Canyon (see Figure 6.2-1). Because no hazardous materials are expected in this outfall. NFA is recommended.

EPA Response: EPA agrees that this unit does not need to be added to the permit.

25. DOE Comment: SWMU 15-014(f) - This SWMU is located 5 ft south and 13 ft east of the southwest corner of building TA-15-263. It empties into a ditch that runs into Three-Mile Canyon. Once-through cooling water is the only source of liquid for this outfall. This outfall is covered by EPA permit no. 04A 121 (Francis 1992, 10-002). Since no hazardous material has been emptied into this outfall and it is currently regulated by other statutes, NFA is recommended.

EPA Response: EPA agrees that this unit does not need to be added to the permit.

26. DOE Comment: SWMU 15-014(g) - The site is an outfall located 11 ft east of the northeast corner of building TA-15-203. It is a drain that was used for once-through cooling water to an air compressor. The water drained into a ditch emptying into Canon de Valle. This outfall currently has EPA permit 04A093. The air compressor has been taken out of service and removed (Francis 1992, 10-0002). Since no potentially hazardous materials were introduced into this water this PRS is recommended for NFA.

EPA Response: EPA agrees that this unit does not need to be added to the HSWA permit.

27. DOE Comment: SWMU 16-011(b) - The site ia a typographical error and should not have been put in the Permit Modification. This unit does not exist in any of the SWMU reports or the HSWA permit.

EPA Response: While this unit appeared in the crosswalk table submitted by LANL in November 20, 1992, it does not appear in the RFI Work Plan for OU 1082. EPA has removed the unit from the permit.

28. DOE Comment: SWMU 16-007(b) - The 1990 SWMU Report describes this unit as a small earth pond west of TAs 16-89, 16-90, 16-91, 16-92 and 16-93, into which floor drains emptied (LANL 1990, 0145).

Based on field observations and a review of the existing documentation of the drainage system for TAs 16-89 through 16-93, there is no evidence of a pond west of these buildings. It is more likely that the water sampled in 1970 came from the pond to the northeast of TAs 16-89, 16-90 and 16-91. That pond is still in existence as SWMU 16-008(a).

We believe PRS 16-007(b) is an example of an error in the SWMU Report. It is the conclusion of the OUPL that this PRS does not exist.

EPA Response: EPA agrees and this unit will not be added to the permit.

29. DOE Comment: SWMU 35-001 - This unit consists of two 4-inch diameter, 125-ft-long stainless-steel tubes suspended vertically inside 8-in. diameter carbon-steel-cased wells (see Section 3.3.2.1). Each tube, which is backfilled under pressure with nitrogen and sealed, contains 150 liters of liquid sodium reactor coolant contaminated with ²³⁹Pu and associated fission products. Gross-gamma activity emitted from the site is monitored. Sodium and radionuclides could not be released from the tubes unless the steel tubes were cracked. If the tubes were breached, the sodium would be expected to react explosively with moisture in the soil or tuff. Because the steel tubes have not shown signs of cracking, it is believed that no releases of sodium have occurred. Furthermore, potential contamination of the surrounding tuff cannot be assessed without drilling deep wells adjacent to the tubes. Such drilling activity would greatly increase the likelihood of breaching the containment tubes and could cause a potentially dangerous release. This site is recommended for NFA for the following reasons: no evidence of a release exists; the engineered controls presently in place preclude any migration of contaminants to the environment; assessment/remediation options pose a greater risk to human health and the environment than not investigating the site; and this site is designated as MDA-W which will be maintained under perpetual institutional control.

EPA Response: Unless the liquid sodium reactor coolant has the characteristics of hazardous waste as defined in 40 CFR Subpart C, then this unit is probably not a SWMU. The unit will not be added to the HSWA portion of the permit.

30. DOE Comment: SWMU 35-004(c) - This area is an outdoor container storage area located on the south side of TA-35-125 (see Section 3.3.2.1). It is used for the storage of drums of dielectric oil. The storage area is associated with the waste oil treatment system, SWMU No. 35-007, and is located in a covered, bermed area that is equipped with sumps and pumps for spill containment. Oil stains were observed within this bermed area, but the berm is designed to prevent spills from reaching the environment. NFA is recommended for this site because site design precludes the migration of contaminants of concern (COCs) to the environment.

EPA Response: This site does not need to be added to the HSWA portion of the permit.

31. DOE Comment: SWMU 35-004(d) - This is a container storage area located inside of a building. A site inspection on August 1991 revealed no evidence of spills at these sites. NFA is recommended for this site because even if spills occurred at this storage area, site design physically precludes migration of COCs to the environment and the release would have been cleaned up under 40 CFR §262 recommendations.

EPA Response: This site will not be added to the HSWA portion of the RCRA permit.

32. DOE Comment: SWMU 35-014(c) - The site is a 10 ft wide by 20 ft-long stained area observed on a sloping surface near the southeast corner of TA-35-20. This stained area is probably the result of past dielectric oil spills from nearby aboveground tanks that were labeled as PCB-free located southwest of building TA-35-29. These tanks were associated with the decommissioned oil treatment facility identified as SWMU Nos 35-015(b) and 35-014(d) which will be investigated in Aggregate I. This area is downslope from Aggregate T, SWMU NO. 35-018(a), where leaking transformers containing PCBs were reported. Oil stained soil occurs at the entry point of a culvert that drains this area, and also at the point at which the culvert ends near the southeast corner of TA-35-29. In 1992, the area of 35-014(c) was excavated, and refilled for work performed in the southeastern corner of TA-35-29, and covered with asphalt. If COCs are detected in significant quantities in Aggregate I or T, they may affect this area, but on its own account, this area is recommended for NFA on the basis that this area has not been used for the management of RCRA hazardous wastes, and that the migration pathways of the site are minimized by the asphalt capping the area.

EPA Response: This site does not need to be added to the HSWA portion of the RCRA permit.

33. DOE Comment: SWMU 42-004 - This canyon disposal site, was used for dumping building debris (NOTE: PRS No. 42-004 is the same as C-42-001). Soil samples collected and analyzed in 1991 as part of an

ERIA contained gross-alpha, -beta, and -gamma at background levels. No VOCs, semivolatile organic compounds (SVOCs), or PCBs were detected. Toxicity characteristic leaching procedure (TCLP) metals (Ag, As, Ba, Cd, Cr, Hg, Pb, and Se) were below regulatory level in 40 CFR 261.24, Table 1. NFA is recommended for this site because the site has been characterized and it has been determined that COCs are not present in concentrations that might pose a risk to human health or the environment.

EPA Response: This site does not need to be added to the HSWA portion of the RCRA permit.

34. DOE Comment: SWMU 46-004(i) - This is an active cooling tower outfall. Engineering drawings indicate that there are no other sources contributing flow to this outfall. No chromates were used for make-up water treatment at TA-46 and other chemicals used are benign. The PRS present no threat to workers, the public, or the environment, and is recommended for NFA.

EPA Response: EPA agrees that this site does not need to be added to the HSWA portion of the RCRA permit.

35. DOE Comment: SWMU 46-004(j) - This is an active cooling tower outfall. Engineering drawings indicate that there are no other sources contributing flow to this outfall. No chromates were used for make-up water treatment at TA-46 and other chemicals used are benign. The PRS presents no threat to workers, the public, or the environment, and is recommended for NFA.

EPA Response: EPA agrees that this unit does not need to be added to the HSWA portion of the RCRA permit.

36. DOE Comment: SWMU 46-004(l) - This PRS was a commercial, free-standing cooling unit that has been removed. Blowdown discharged to Outfall NN. Engineering drawings indicate that there were no other sources contributing flow to this outfall. Because no chromates were used for make-up water treatment at TA-46 and other chemicals used are benign. The PRS presents no threat to workers, the public, or the environment and is recommended for NFA.

EPA Response: EPA concurs that this unit does not need to be added to the HSWA permit.

37. DOE Comment: SWMU 48-004(d) - This unit is a small tank that was installed below the hot cell in the basement of TA-48-1, but has never been used (see Section 3.5.2.1). NFA is recommended for this site because the site was never used, and because the site design and conditions preclude migration of COCs from the site to the environment.

EPA Response: EPA agrees that this unit does not need to be added to the permit.

38. DOE Comment: SWMU 48-007(e) - This drain and outfall PRS 48-007(e) were submitted to the EPA in May 1985 for inclusion under the NPDES permit, but were dropped from the permit in 1991. The outfall discharged a maximum of 500 gal/hr as noncontact cooling water used to cool an electromagnet in the northwest corner of TA-48-8, the isotope separation building (LANL 1990, 0145). The outfall has been used since 1984. The water discharged in the outfall was used for once-through cooling, and there has not been access for chemicals or solvents to enter the cooling water system. In 1991, samples were collected in the area to determine if COCs, including acetone, alcohol and benzene had been discharged. The analysis revealed background levels of gross-alpha, -beta, and -gamma, and that all TCLP metals were below guidelines of 40 CFR 261.24. No SVOCs or PCB compounds were detected, but trace amounts (<52 ppb) were found of p-isopropyltoluene (p-Cymene), isopropylbenzene (cumene), and trichlorotrifluoroethane (Freon) were detected in the samples collected. Since this PRS has not been used for the management of hazardous materials, which has been verified through sampling this PRS is recommended for NFA.

EPA Response: This unit does not need to be added to the HSWA portion of the RCRA permit.

39. DOE Comment: SWMU 52-002(g) - The unit is not an active septic system as designated in the 1990 SWMU report, but simply a sewage holding tank that was installed in 1989 or 1990 (see Section 3.6.2.1). The holding tank serves offices in a new building in which hazardous and radioactive materials have never been managed. NFA is recommended because the site has never been used in the management of hazardous or radioactive materials.

EPA Response: This unit does not need to be added to the HSWA portion of the RCRA permit.

40. DOE Comment: SWMU 52-003 - This SWMU consisted of two 3-in. cast-iron industrial waste lines that transported liquid wastes from the UHTREX reactor to a waste treatment facility (SWMU No. 52-003[a]) and then to TA-50. Lines 65 and 66 were removed in 1988 during the UHTREX D&D project, and 173 soil samples were collected at 2-ft intervals along the route of the lines. Sample depths ranged from 5 ft to 7 ft. Beta activity was nondetectable, alpha and gamma activity were far below the site-specific RESRAD model. All metals were within background levels. Organics were below detection. The site is recommended for NFA on the basis that the site has undergone D&D and confirmatory sampling indicates that COCs are not present in concentrations that exceed natural background levels.

EPA Response: EPA concurs that this site does not need to be added to the HSWA portion of the RCRA permit.

41. DOE Comment: SWMU 52-004 - The unit is an inactive outfall from

which only noncontact cooling water associated with a simulated fuel rod cooling process was discharged (see Section 3.6.2.1). A radiation survey conducted in the area of the outfall during a 1988 ER Program site reconnaissance did not exceed background levels. NFA is recommended because the site was never used for the management of hazardous or radioactive materials.

EPA Response: The unit is not a SWMU and will not be added to the HSWA portion of the permit.

42. DOE Comment: SWMU 59-003 - This SWMU consists of three sumps in the basement of TA-59-1. The 100-gal. capacity sump and lift station in Room B-7 is constructed of cast iron and has been tied to the sanitary sewer line since the building was constructed in 1951. Engineering Drawings ENG-C 43430, and ENG-R 5300 show that the two sump pumps in Rooms B-8F and B-8J are constructed of acid-resistant plastic with a capacity of 5 gal. The two sump pumps sit on the concrete floor and are tied to the acid waste line.

EPA Response: These sumps do not need to be added to the HSWA portion of the RCRA permit.

43. DOE Comment: SWMU 60-004(a) - This is a storage area that appeared to contain old equipment and general debris (LANL 1990, 0145). It is located three-tenths of a mile east of the locked entrance gate on Sigma Mesa. The PRS site is actually a 2.5 acre, active storage yard for equipment and supplies used by Johnson Controls. Stored items include 20 x 10 ft concrete forms, electrical equipment, a unit substation transformer, wooden cable reels, light poles, and 4 x 6 in. lumber posts. There are several 100 ft-long electric poles, electrical insulators, and 4 -in. conduit of various lengths (Griggs 1992, 17-671). Blue stickers on the electrical equipment state that they contained no PCBs. HSE-7 verified that the transformers have been tested and contain no PCBs (Holm-Hansen no date, 17-554). This PRS has been recommended for NFA in work plan for OU 1114 and approved by EPA.

EPA Response: EPA agrees that this area does not need to be added to the HSWA portion of the RCRA permit.

44. DOE Comment: SWMU 60-006(c) - This site is listed as an inactive septic system located at the Nevada Test Site (NTS) Test Rack Fabrication facility (LANL 1990, 0145). This PRS is a duplicate of SWMU 60-006(a) (see Subsection 5.6).

EPA Response: The site will not be added as it is a duplicate.

45. DOE Comment: SWMU 61-004(b) - This is an abandoned septic tank that was encountered during trenching activities conducted as part of a PCB cleanup in September 1989. The cinder block structure discovered approximately 1 ft below the surface on the south side of East Jemez Road. The site is located approximately eight-tenths

of a mile east of the intersection of east Jemez Road and Diamond Drive. The structure is approximately 6 x 8 x 6 ft deep, with a corrugated tin roof covered with concrete. At the time of discovery, there was a 6-in. feeder pipe protruding from the top and a 6-in. effluent pipe protruding from the side wall, leading to the conclusion that the structure was probably a septic tank. The northwest corner of the tank was cracked open by the trenching equipment. Visual inspection indicated that the tank was dry (LANL 1992, 17-694).

The septic tank was used for disposal of sanitary wastes generated by contracting firms operating in the vicinity, as documented in historical aerial photographs of the area (LANL 1992, 17-692). Operations conducted in the buildings did not generate hazardous waste. The tank was never removed.

EPA Response: EPA agrees that this site does not need to be added to the HSWA portion of the RCRA permit.

46. DOE Comment: SWMU 72-002 - This is a site had been identified as a mortar impact area in Sandia Canyon that was used during World War II. Historical information evaluated during preparation of the RFI work plan did not substantiate use of the site for this purpose. The information reviewed included documentation of the extensive investigations of suspect impact areas that were performed in 1962 following the incident in which Los Alamos County residents found a live bazooka round that later exploded. The information reviewed did not identify any impact area in Sandia Canyon. Because there is no evidence of any release of hazardous constituents at this site, it is proposed for NFA.

EPA Response: EPA agrees that this site does not need to be added to the HSWA portion of the RCRA permit.

47. DOE Comment: Table A as submitted in December, 1993.

EPA Response: EPA's review of the original SWMUs in the permit, Table A as provided in the DOE December, 1993 comments and the listing of SWMUs in Appendix F of the Installation Work Plan as lead to the following differences between Table A as submitted by DOE and Table A in the final HSWA permit:

A. SWMU 15-004 (d) was not requested to be added to the HSWA portion of the permit and it was not in the original permit; therefore, EPA did not add this SWMU into Table A.

B. SWMU 16-005 (i) was included in the permit modification requested by LANL in February, 1993. This SWMUs was not included in the SWMUs that LANL requested not to be added in their December, 1993 comments; therefore, EPA has left this SWMU in the permit.

C. SWMUs 21-016 (a-g) were incorrectly listed in LANL's Table A. They should have been listed as SWMUs 21-016 (a-c) as is indicated in Appendix F of the Installation Work Plan which combined some of the SWMUs. EPA has listed these SWMUs as 21-016 (a-c).

D. In DOE's Table A, Technical Area 35 there is a typographical error in which SWMUs 35-004 (g-u) should be listed as 35-004 (g-h). EPA has made this change in the final Table A.

E. In DOE's Table A, Technical Area 52, SWMU 52-002 (g) is included; however, DOE requested that this SWMU not be added in their comments and EPA has agreed. EPA dropped this unit from the final Table A.

F. Technical Area 59, SWMU 59-001 was dropped from DOE's Table A; however it should have remained in the Table and EPA has included it in the final Table A.

G. Technical Area 61, SWMU 61-004(a) was requested to be added to the permit by LANL in the February permit modification, and was not requested to be deleted in the December, 1993 comments. EPA has included this unit in the final version of Table A.