TA 03 #31526

064.31526.1

Los Alamos
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

DATE: February 22, 1994
IN REPLY REFER TO: EM/ER:94-A065
MAIL STOP: M992
TELEPHONE: (505) 667-0819

Mr. Ted Taylor, Program Manager
Department of Energy
Los Alamos Area Office, MS A316
Los Alamos, NM 87544

Dear Mr. Taylor:

SUBJECT: ADDITIONAL DOCUMENTATION FOR NOTICE OF DEFICIENCY (NOD) FOR OPERABLE UNIT (OU) 1114

Enclosed please find the additional documentation to support Los Alamos National Laboratory's response to an NOD received from the Environmental Protection Agency (EPA), Region 6. This response is due to EPA by March 1, 1994.

This documentation is being supplied to the Department of Energy for informal review. Your comments would be most helpful if provided by March 25, 1994.

Included in this document is a copy of the NOD response (addendums not included) from OU 1114 to Barbara Driscoll, EPA, for reference; a detailed schedule of activities for OU 1114; and the text, figure, and table changes indicated in the NOD response that have been incorporated into the OU 1114 Resource Conservation and Recovery Act Facility Investigation Work Plan. Any pages that have had a text change are also included. An exception is made in the cases of Chapters 5 and 6. All of Section 5.2 through 5.10 and all of Chapter 6 have been included for easy reference.

As stated in the original NOD response, the additional sampling plans will follow by March 15, 1994.

Should you have any questions, please feel free to contact Garry Allen. He can be reached at 667-3394.

Sincerely,

David McInroy
Acting Program Manager

DM/vvm

Received by ER-RPF
FEB 23 1994
JCG

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(w/o enclosure)
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OU 1114 RFI Work Plan
NOD response

Additional documentation

As stated in the August 1993 Notice of Deficiency (NOD) response, follow-up documentation of text, figure, and table changes called out in the NOD that were not specifically included, will be provided to EPA by March 1, 1994. In addition, any sampling plans called out in the NOD response will also be provided to EPA by March 15, 1994.

Included in this document is:

- a copy of the NOD response (addendums not included) from OU 1114 to Barbara Driscoll, EPA, for reference;
- a detailed schedule of activities for OU 1114; and,
- the text, figure, and table changes indicated in the NOD response that have been incorporated into the OU 1114 RFI Work Plan. Any pages that have had a text change are included. An exception is made in the case of Chapters 5 and 6. All of sections 5.2 through 5.10, and all of chapter 6 have been included for easy reference.

The additional sampling plans will follow by March 15, 1994.

NOTICE OF DEFICIENCY RESPONSE FOR OU 1114

All text and table changes called out in the NOD that are not specifically included, will be provided by March 1, 1994. In addition, any sampling plans called out in the NOD Response will also be provided by March 15, 1994.

1. Executive Summary, p. ES-4 - LANL makes the statement that "A CMS is not necessary for OU 1114; therefore, no cost estimates are required". It has not been determined yet whether or not a CMS will be needed at OU 1114; therefore, the above statement is inaccurate and should be removed from the work plan.

The statement "A CMS is not necessary for OU 1114; therefore, no cost estimates are required" will be deleted.

2. Executive Summary - The length of time required for the submittal of the final RFI Report is too long. LANL shall submit the final RFI report 6 months after receipt of data from the final RFI field work. LANL shall submit a schedule of the RFI with more detail. A sub-schedule for each SWMU aggregate, SWMU or AOC should be combined in a master schedule which encompasses the seven years proposed for the field activities.

LANL will submit the final RFI report 6 months after the receipt of data from the final RFI field work. A more detailed schedule of OU 1114 RFI activities will be provided by March 1, 1994.

3. 2.2.1 Background Information, p. 2-6 - LANL makes a conclusion that the facilities at TA-3 have never released significant amounts of hazardous constituents. This statement should be deleted. It is the goal of the RFI to determine the nature and extent of the releases. It is the goal of the CMS to determine if these releases are significant.

The statement that "the facilities at TA-3 have never released significant amounts of hazardous constituents" will be deleted.

4. 3.5.2.3 Perched Aquifers, p. 3-13 - The statement is made that the main aquifer does not appear to be hydrologically connected to the overlying perched zones; therefore, the perched zones are not of concern as they are not drinking sources. Unless no interconnection between the perched and main aquifer can be demonstrated, the perched aquifers are potential sources of contamination to the aquifers. The perched zones are potential contamination sources to the surface water.

The text relating to hydrological connections between the perched zones and the main aquifer has been changed to state a potential connection may exist. LANL agrees that the ground water issue will be pursued as deemed necessary if initial OU 1114 investigations indicate the potential exists for contamination of the perched ground water.

5. 4.2.3 Active Sites, p. 4-10 - EPA will make the final determination whether or not active sites are to be investigated, and if action will be deferred until later. The statement regarding whether or not active sites are to be investigated should be deleted from the work plan. Investigation activities can be performed even if the unit is active.

The statement from Chapter 4, Subsection 4.2.3, p. 4-10, sentence 2-3 reads as follows: "Subsurface PRSs present no current health hazard and characterization of these PRSs would seriously disrupt active operations. Therefore, final investigations and permanent corrective actions for active PRSs or PRSs beneath active sites will be addressed when each site is decommissioned." The text shall be changed to read: "Subsurface PRSs present no current health hazard. Characterization of PRSs that seriously disrupt active operations may be deferred until that site is decommissioned, pending EPA approval."

6. 4.3.1 Potential Contaminants of Concern, p. 4-11 - Initial sampling analysis will be for Appendix IX. Because the list of potential contaminants of concern (PCOC) were determined based only on archival data and the periods of operation for this Operable Unit are lengthy, it does not appear reasonable that a PCOC list can be determined for the entire Operable Unit. If LANL wishes to submit a list of PCOC for areas with recent operation and for which accurate records of hazardous constituents were maintained then EPA will consider a reduction in analysis (LANL appears to have done this in the specific sampling plans). A Target Analyze List (TAL) may be proposed based upon the results of initial Phase I analysis.

LANL is proposing to use the Appendix IX analyte list wherever appropriate. The VOC, SVOC, pesticides, PCB, and metals analyses called for in the work plan are classes of analytes listed in Appendix IX. Combined, these classes make up the entire Appendix IX list. As described in the numbered paragraph 2 in Section 4.3.1 on page 4-11, LANL is proposing to use broad spectrum analyses which cover each of the appropriate classes of Appendix IX compounds.

The anticipated PCOC list given in Table 4-3 on page 4-9 is a summary of the PCOCs known to be used during operations at OU 1114. This list is described in the text in Section 4.2.1 on page 4-8 as a list of primary PCOCs and is not meant to limit the target analytes across the entire OU.

However, there is adequate archival processes documentation available for many of the PRSs in OU 1114 to limit the scope of analyses that need to be conducted. In many cases LANL has eliminated certain classes of compounds (such as SVOCs or pesticides) based on the available archival processes documentation.

Based on the results of the initial Phase I sampling at each site, LANL intends to develop a PRS-specific Target Analyte List for those sites that will require additional sampling.

7. 5.2.1.1 Description and History, p. 5-15 - Why is AOC C-60-005 listed as an area of concern rather than as a SWMU? This unit meets the definition of a SWMU, due to the numerous spills, and presence of hazardous constituents. LANL shall redefine this unit as a SWMU within the work plan.

This AOC has been reassigned a SWMU number. It is now SWMU 60-004(f).

8. 5.2.1.2.1 Nature and Extent of Contamination, p. 5-16 and Table 5-5 Range of VOC Analytical results at AOC C-60-005, p. 5-17 - Text and the results in the Table 5-5 do not agree. Text indicates that carbon disulfide was found at concentrations of less than 0.1 ppm in samples from pad #2, while in Table 5-5, Pad #2, sample #200, carbon disulfide is listed at 106 ppm. Please indicate the correct concentration of the sample 106 ppm.

The correct concentration for carbon disulfide in Table 5-5 shall read 0.106 ppm (not 106 ppm). The text accompanying the table shall be changed accordingly, i.e.; ...carbon disulfide was found at concentrations of less than 0.11 ppm in samples from pad #2... instead of less than 0.1 ppm.

9. 5.2.3 Data Needs and Data Quality Objectives, p. 5-21 - Text appears to indicate that four samples would nominally provide 80% confidence of detection; however, Table 5-7 indicates that only 1 sample will be sent for laboratory analysis. LANL shall submit the three samples with the highest field screening readings from SWMU 60-007(b), and the main drainage ditch TA-60-2 for laboratory analysis (total of 6 samples, plus QA/QC).

The text does indicate that 4 samples will provide 80% confidence of detection, however, LANL proposes to collect 4 to 7 samples at each of these PRSs for analyses at the LANL mobile analytical laboratory for TPH and PCBs. The TPH method will be the laboratory method from SW-846 8015M. This is a GC/FID method for total petroleum hydrocarbons which will be identical to the method run in the confirmation laboratory. The PCB method will be an immunoassy field method performed under controlled conditions in the mobile analytical laboratory. Confirmation samples, analyzed in a fixed laboratory, will only be collected as a quality control measure on the performance of the mobile analytical laboratory. Therefore, the number of samples collected and analyzed in the mobile analytical laboratory at each PRS, along with the confirmation samples should be adequate to meet the data quality objective's 80% confidence of detection.

Table 5-7 indicates that only one sample will be sent for confirmatory sampling at a fixed laboratory. Table 5-7 also indicates that the other four samples taken will be analyzed in a field laboratory (not simply field screened). The field laboratory is capable of detecting PCOCs to a level that at least equivalent to the SALs.

Field screening was not included in the sampling plans or sample tables for the PRSs associated with VCAs for TPH and/or PCBs. This omission will be corrected by adding field screening for organic vapors at all of these PRSs. The field screening will be used to direct sampling for both the mobile analytical laboratory and for the confirmation samples.

The number of both mobile analytical laboratory and confirmation samples were selected assuming a scenario where no contamination is detected. If contamination is detected, additional samples will be collected for analysis at both the mobile analytical laboratory and the fixed (or confirmation) laboratory. At a minimum, in areas where contamination is detected, three confirmation samples will be collected for fixed laboratory analyses. Additional confirmation samples will be collected at a rate of one confirmation sample for every ten mobile analytical laboratory samples.

The work plan text will be revised to indicate this aspect of the sampling plan, and to indicate that additional sampling will be conducted to evaluate both the horizontal and vertical extent of any contamination detected. These changes will be added to the sampling plans for SWMUs 3-003(a,b), 3-056(c), 60-007(a), 60-007(b), 60-004 (b,d,e), 61-001, and AOC C-60-005 [SWMU 60-004(f)].

Laboratory analysis shall consist of metals (TAL metals), and SVOCs (SW 8270).

The text and table shall be changed to include additional analysis for SVOCs and analyses for all metals on the Appendix IX List as agreed upon by LANL and EPA. These metal analyses shall be conducted using appropriate SW 846 analytical methods with the sensitivity needed to evaluate detected concentrations relative to SALs.

In addition, LANL shall include the provision in their work plan to take additional samples where contamination may be indicated to be deeper than 0-18 inches, and send these samples for the above mentioned laboratory analysis.

The text in paragraph 1 & 2, p. 5-25, states that "additional field analysis and confirmatory samples may be required if contamination is detected" additional text shall say "...additional field analysis and confirmatory samples may be required if contamination is indicated to be deeper than 18 inches."

At AOC C-60-005 the confirmatory samples should be collected from the areas of the highest field screening reading.

The following text shall be added to paragraph 1 & 2, p. 5-25, "Confirmatory samples shall be selected from samples analyzed in the mobile field laboratory that have the highest detection below SALs".

Since samples with results greater than SALs will most likely lead to a VCA, the selection criteria for confirmation samples will be to send samples that have the highest detection below SALs. The results for these confirmation samples will indicate whether the VCA was complete, or whether there needs to be more soil removed before the site is considered for NFA.

10. 5.3.4.1.2 Sampling, p. 5-32 - Text indicates that samples for SWMU 3-015 will be collected from the erosion channel leading from the outfall; however, Figure 5-6 makes it look like two of the samples may be collected outside of the channel. Samples should be collected form the erosion channel. All samples should be analyzed for metals (SW 846 method 6010) and SVOCs. Samples should be analyzed for VOCs based on field screening.

Samples will be collected form the erosion channel (figure will be changed accordingly). The text and table shall be changed to include additional analysis for SVOCs and analyses for all metals on the Appendix IX List as agreed upon by LANL and EPA. These metal analyses shall be conducted using appropriate SW 846 analytical methods with the sensitivity needed to evaluate detected concentrations relative to SALs. In addition, the text and tables shall be changed to indicate that samples shall be analyzed for VOCs based on field screening results.

11. 5.5.4.1.2 Sampling, p. 5-55
a) An additional sample needs to be collected at SWMU 3-012 (b) within the actual channel area and analyzed for the same constituents as the other samples.

Additional samples will be collected from the outfall erosion channel. This will be incorporated in the part two RFI work plan, since three additional SWMUs empty into the same erosion channel.

b) How will the locations of the five samples collected for SWMU 3-014 (a, e) be determined? LANL shall include the rationale that will be utilized to determine the sampling locations for SWMU 3-014(a, e).

The location of the five samples collected for SWMU 3-014 (a,e) will be determined by professional judgment, biased by historical information that sludge was used as a soil amendment on the grasses surrounding the "entrance works." The five soil samples were selected from areas differing in vegetation and topological features at the site. One sample location was selected to represent the level grassy areas which make up approximately 50% of the open areas at the site. Two other sample locations were selected from the two other most common vegetation types. One sample was located at a topological low point, this location appears to collect sediment from the surrounding area. The remaining sample location was selected in the main runoff channel. The channel does not receive much flow, and there appears to be a significant amount of sediment that has collected over the years.

12. 5.5.4.1.3 Laboratory Analyses, p. 5-58 - All the samples collected at these SWMUs will be analyzed for metals using SW 846 method 6010.

The text and table shall be changed to include additional analyses for all metals on the Appendix IX List as agreed upon by LANL and EPA. These metal analyses shall be conducted using appropriate SW 846 analytical methods with the sensitivity needed to evaluate detected concentrations relative to SALs.

13. 5.6.4.1.3 Laboratory Analysis, p. 5-66 - LANL shall include analysis for the additional Subpart S metals.

The text and table shall be changed to include additional analyses for all metals on the Appendix IX List as agreed upon by LANL and EPA. These metal analyses shall be conducted using appropriate SW 846 analytical methods with the sensitivity needed to evaluate detected concentrations relative to SALs.

14. 5.7.1.2.1 Nature and Extent of Contamination, p. 5-71 - The primary purpose of the RFI is to determine if a release has occurred. The presence of contaminants above screening action levels (SALs) will be used to determine whether a Corrective Measure Study (CMS) will be required by EPA. Therefore, LANL cannot make the determination to not analyze for a hazardous constituent based on the theory that the concentrations of that contaminant will not be above SALs. Delete all language associated with the theory that concentrations of contaminants will not be above screening action levels.

All language in section 5.7.1.2.1 associated with the theory that concentrations of contaminants will not be above screening action levels shall be deleted.

15. 5.7.4.1.2 Sampling, p. 5-77
a) Analysis for metals and SVOCs should be included for two additional locations in SWMU 60-007(a) (total of three locations undergoing CLP analysis). Two of these samples should be collected from the area where the majority of spills are located.

The text on p. 5-77, paragraph 2, and the associated table, shall be changed as follows: "Three confirmatory samples will be collected at SWMU 60-007(a) for TPH, metals, and SVOCs analyses at a fixed laboratory."

In addition, the text on p. 5-75, end of paragraph 3 & 4, and the associated table, shall be changed as follows: "At least two confirmatory samples will be collected at SWMU 60-004(b,d) for PCBs, TPH, metals, and SVOC analyses at a fixed laboratory."

b) A total of three confirmatory samples should be analyzed from the areas that were supposedly remediated for metals, PCBs and TPH.

The text on p. 5-77, Subsection 5.7.4.1.3, and the associated table, shall be changed as follows: "Confirmatory samples shall be collected at a fixed laboratory for PCB, TPH, metals, and SVOCs analyses as described in Subsection 5.7.4.1.2. "

Field screening was not included in the sampling plans for this PRS. This omission will be corrected by adding field screening for organic vapors The field screening will be used to direct sampling for both the mobile analytical laboratory and for the confirmation samples.

16. 5.8.4.1.3 Laboratory Analysis, p. 5-88 - Samples from SWMU 60-004 (c) should by analyzed for metals using EPA method 6010 found in SW 846.

The text and table for SWMU 60-004(c) shall be changed to include additional analyses for all metals on the Appendix IX List as agreed upon by LANL and EPA. These metal analyses shall be conducted using appropriate SW 846 analytical methods with the sensitivity needed to evaluate detected concentrations relative to SALs.

17. 5.8.4.1.2 Sampling, p. 5-88 - What is the purpose of the six samples located outside the fence? If there are any drainage routes located near the pond then these might be preferentially sampled. Otherwise the samples should be located closer to the pond.

The text and figure will be changed to reflect six sample locations relocated inside the fence, closer to the pond.

18. 5.9.4.1.2 Sampling, p. 5-97 - Additional samples should be collected in the other open areas of the drainage ditch closer to the original drain outlet from TA-3-38. In addition, samples should also be analyzed for metals (SW 846, method 6010) and SVOCs.

As we discussed per our phone conversation on November 12, 1993, there is no sample collection location closer to the SWMU other than the outfall located approximately 800 yards downgradient. This outfall is being sampled for metals and SVOCs in association with the Storm Drains aggregate.

19. 5.10.1.2.1 Nature and Extent of Contamination, p.5-102 -
a) The action level for mercury in Subpart S is 20 ppm; therefore, LANL should revise their SAL to be the same and not higher (24 ppm).

The SAL for mercury is 24 ppm which is higher than the action level given in Subpart S (20 ppm). Subpart S provides several "example" levels but the user of the guidance is free to estimate action levels independently using the provided calculations and assumptions and to use updated toxicity values when necessary. The calculation for the two values is the same but RCRA has rounded their value to one significant digit. Thus, the SAL is the same number, except it has not undergone rounding. In several cases for different chemicals, the Subpart S value is higher than the SAL. The SAL of 24 ppm for mercury should remain the appropriate value for LANL's purpose because it is more accurate, adequately protective of human health, and consistent with the value listed in LANL's Installation Work Plan.

b) In addition, the presence of solvents may not be ruled out based on a visual inspection. Any samples which are field screening for TPH and have results less than 100 ppm, should be analyzed for SVOCs and metals (SW 846 method 6010).

The statement relating to the visual inspection of the asphalt will be deleted. The text and table shall be changed to include additional analysis for SVOCs and analyses for all metals on the Appendix IX List as agreed upon by LANL and EPA. These metal analyses shall be conducted using appropriate SW 846 analytical methods with the sensitivity needed to evaluate detected concentrations relative to SALs.

c) All the samples collected in the 3-056(c) area for which a VCA is not conducted should be analyzed for VOCs and metals (SW 846 method 6010)

The text and table shall be changed to indicate that confirmation samples collected around the edge and below any VCA conducted will include additional analyses for all metals on the Appendix IX List as agreed upon by LANL and EPA. These metal analyses shall be conducted using appropriate SW 846 analytical methods with the sensitivity needed to evaluate detected concentrations relative to SALs. The text and table shall also be changed to include additional analyses for VOCs based on field screening.

Field screening was not included in the sampling plans or sample tables for this PRS. This omission will be corrected by adding field screening for organic vapors. The field screening will be used to direct sampling for both the mobile analytical laboratory and for the confirmation samples.

d) The three samples taken in the drainage channel at SWMU 61-001 should be analyzed for SVOCs and metals (SW 846, 6010).

The text and table shall be changed to indicate that confirmation samples collected from the drainage channel will include additional analyses for all metals on the Appendix IX List as agreed upon by LANL and EPA. These metal analyses shall be conducted using appropriate SW 846 analytical methods with the sensitivity needed to evaluate detected concentrations relative to SALs. The text and table shall also be changed to include additional analyses for SVOCs.

CHAPTER 6, FURTHER ACTION REQUESTS

General Comment: The statement is repeatedly made that some of the materials spilled are not target compound list (TCL) materials. It is important to note that the list of hazardous constituents (Appendix VIII) which are regulated under RCRA covers more than TCL materials; therefore, the material spilled may not be on the TCL, but may still be regulated by RCRA.

Comment noted.

20. In addition, if new information becomes available for any site for which No Further Action (NFA) has been determined which indicates possible contamination then LANL will be required to investigate these areas.

Comment noted.

21. SWMU 61-002, p.6-2 - SWMU 61-001 is not currently in Module VIII of the HSWA permit whereas, SWMU 61-002 (originally listed at 3-003(c) is in the permit. It would have made more sense for LANL to have renumbered SWMU 61-001 to 61-002 in the work plan when LANL realized this was a duplicative SWMU. For this reason, NFA is not granted for SWMU 61-002 as it is still listed for investigation under the HSWA permit. LANL should note the duplication of the SWMU numbers in their next report.

LANL shall change the SWMU noted in Chapter 6, SWMU 61-001, to SWMU 61-002. SWMU 61-001 will be the numbered SWMU investigated in Chapter 5.

22. EPA will not approve NFA for the following active units without concurrent approval from the New Mexico Environment Department:
3-056(b) 61-005 3-035(b)
3-044(a) 61-006 3-001(k)

Comment noted. LANL shall contact Tim Michael - NMED - AIP.

23. SWMU 3-038 (a, b), p. 6-7 - Were any samples analyzed for hazardous constituents? This site cannot be deferred as it is not a site actively regulated under RCRA. Being located in an active area (traffic area) does not qualify as being an actively regulated site. It appears that action is appropriate for the portion of the waste line which has not been removed. LANL shall provide sampling plans for this area which will be implemented when road work makes it possible. in addition, the information presented is not sufficient for a NFA determination.

LANL will provide a sampling plan for this SWMU by March 15, 1994.

24. SWMU 3-037, p. 6-11 - Additional information needs to be provided for this SWMU. It is unclear from the text what analysis was actually conducted in the 1991 sampling. If TCLP was the only analysis conducted then finding 5 ppm lead means the waste exhibits the characteristic of toxicity and is hazardous. TCLP was an inappropriate test to determine if the area had been impacted by waste management practices. In addition, it needs to be clarified if the collapsed waste line was addressed and remediated. Is this a regulated unit?

No, this is not a regulated unit. LANL will provide a sampling plan for this SWMU by March 15, 1994.

25. SWMU 3-028, p. 6-12 - What is the period of operation for this SWMU? has the SWMU always been covered by an NPDES permit? This information needs to be submitted for this unit.

Period of operation for the asphalt batch plant's air filter (scrubber water pond) is 1961 - present. NPDES permit for the pond started when NPDES first started permitting outfalls at the Lab, in the mid 1970's. Since the asphalt processes are the same today as when it started NPDES, outfall permitted concentrations should be representative of the maximum concentration of constituents in the pond at any given time. The permitted concentrations are attached as "Addendum A" for your information.

26. SWMU 3-010(a), p. 6-12 - EPA is awaiting confirmatory sampling prior to making a decision for this SWMU.

Comment noted. Additional analyses has been asked for at this SWMU after initial composite sampling was received. LANL will relay information as soon as it is available.

27. SWMU 3-029, p. 6-13 - LANL's current actions at this SWMU under the citation issued by NMED are considered stabilization and not necessarily remediation. This SWMU should be investigated and a work plan submitted.

A work plan for all SWMUs located within the boundary of the asphalt batch plant will be submitted as an aggregate in the part two OU 1114 RFI work plan.

28. SWMU 3-009(a), p. 6-16 - No dates of operation are given for this SWMU. Can LANL demonstrate that the fill at this area is only from construction debris?

Dates of operation are from 1961 - present. The attached memo, "Addendum B", was generated after a site visit with the contractual supervisor of Roads and Grounds for the Lab, who for his 11 year tenure (1977 - 1988) observed only construction debris from normal roads/grounds maintenance and operation used as fill material at the area in question.

29. SWMU 3-009(d), p. 6-18 - Further information needs to be provided about this SWMU. The origin of the material should be determined. How do you tell from a visual inspection that material is not TAL, TCL or radioactive?

The statement .."there is no visible indication of TAL, TCL or radioactive material discarded in this area..." will be deleted from all text in Chapter 6. Archival aerial photographs showing this area from 1950's to the present, and visual evidence of asphalt, concrete, rebar, wood pieces etc., are all that is available to establish that this was a debris depot. A hand-held beta/gamma monitor was used during the site visit and there was no indication of radioactivity.

30. SWMU 60-002, p. 6-20 - LANL should ensure that these debris piles have been screened for potential radioactivity.

Comment noted.

31. SWMU 3-013(c), p. 6-25 - Some confirmatory sampling should occur to ensure that there has not been a release to the environment.

The text will be clarified to state: The area surrounding the SWMU is asphalted and has always been asphalt during the period the cable-cleaning operations took place (operations ended in the mid-to-late 1980's). The area has not been re-asphalted since then. There is no visual evidence of asphalt degradation or staining due to releases of kerosene. The area is graded such that it slopes to the east emptying into a storm drain grate that runs underground until it daylights 500 yards or so away. This drain channel is composed of rock-set-in-concrete. The first sediment catchment basin is located at the NPDES permit location an additional 500 ft downstream. We are sampling this outfall in association with SWMUs 3-013 (a,b) the storm drains aggregate.

32. SWMU 3-013(e), p. 6-27 - Ethylene glycol is listed in Appendix VIII as a hazardous constituent. In the future, LANL should clean-up these spills rather than allow them to drain to the storm drain.

Comment noted.

33. SWMUs 3-036(a,c,d,e), p. 6-30 - LANL shall provide documentation from the McVey report (McVey, 1989, 17-582) for EPA review. Also in the Rationale for Recommendation section on p. 6-31, what are the areas of off site migration of hazardous substances that the laboratory is planning to remediate?

The McVey report is included as "Addendum C". A work plan for all SWMUs located within the boundary of the asphalt batch plant will be submitted as an aggregate in the part two OU 1114 RFI work plan.

34. SWMUs 3-026 (d), p. 6-36 - LANL has just requested that this SWMU be added to the HSWA permit. An inspection of the tank and possibly sampling should occur. LANL should reevaluate why they requested this SWMU be added to the permit.

LANL requested that this SWMU be added to the HSWA permit on the basis of the description of the SWMU as a sump in the basement of the Van de Graaff building that received sanitary wastes and liquids from the floor drains. At the time of the HWSA permit modification the facility had not been investigated. Since then the sump has been visually inspected and there are no indications that any leaks have occurred. This sanitary sump (or lift station) is integrated into the foundation of the Van de Graaff building. Therefore, it is impossible to inspect underneath without shutting down the operations at the Van de Graaff building while the foundation for the Van de Graaff building is breached and repaired for the inspection. It would be possible to sample the fluid in the sump, however, the possibility that the fluid is contaminated is remote due to administrative controls on the sinks and floor drains that drain into this sump.

The sump is active and further investigation at this time would seriously disrupt the operation at the Van de Graaff building. It is recommended that investigation of SWMU 3-026(d) be deferred until the building is decommissioned or no longer active, pending EPA approval.

35. SWMUs which LANL requested by added to the HSWA permit in March 1993, for which NFA has been requested:

59-003	**61-004(a,b,c)**
3-013(e,g)	**3-020(b)**

As agreed upon by LANL and EPA, additional information will be supplied during the public response period for the permit modification. This additional information will answer why these units do not need to be put in the permit modification.

36. LANL may apply under a Class III permit modification for removal of the following SWMUs from the permit:

3-009(b	**3-020(a)**
3-009(c)	**3-018**
3-009(e)	**59-001**
3-009(f)	**3-043(e)**
3-009(g)	**60-006(c)**
3-003(c)	**3-056(a)**
3-012(a)	**3-039(a)**
60-002	

Comment noted.

37. The following SWMUs do not need to be added to the HSWA permit for investigation:

3-010(b)	**60-001**
3-010(c)	**64-001**
3-010(d)	**3-055(b)**
3-013(d)	**30-001**
3-013(f)	**59-002**
3-013(h)	**60-001(b)**
61-003	**60-001(d)**
60-003	**60-004(a)**
60-005(b)	**60-006(b)**
3-039(b-e)	

Comment noted.

Addendum B:

Memo Regarding SWMU 3-009(a)

Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

memorandum

To: Mike Tomlinson, Supvsr, County Landfill

Date: November 15, 1993

From: Lynda Sobojinski, CLS-DO

MAIL STOP/TELEPHONE: MS-E525/5-8339

Symbol: CLS-ER/LS-93:020

Subject: **MATERIALS DEPOSITED AS FILL, SOUTH OF THE ASPHALT BATCH PLANT, TA-3-70, SWMU 3-009(a).**

The first week of November, 1993, you escorted me to the fill area in question at the asphalt batch plant and described the operations that took place during your employment with the laboratory maintenance contractor as follows:

> "The source of materials used as "fill" south of the asphalt batch plant are items that may be considered "scrap" or "extra" roads/grounds maintenance materials. These materials include product from, and used in, the asphalt batch plant such as 80-100 oil, asphalt emulsions, and hot asphalt associated with the plant. None of these materials are classified as a hazardous material, and asphalt compounds are not considered hazardous wastes. Other items included in the "fill" may be small sections of corrugated steel culverts, concrete, rebar, and other miscellaneous construction materials, for sidewalks, curbing, road maintenance, landscaping, etc.
>
> It was common practice for road crews to return to the batch plant after roads/grounds maintenance and deposit remaining construction material in an area south of the plant. This area sloped downgradient. Once materials were deposited, a layer of soil/sand/gravel from the batch plant was pushed over the rubble. This action decreased the downgradient slope of the terrain."

You also stated that no hazardous constituents were deposited during your eleven year tenure with roads and grounds for Pan Am World Services and former Zia Corp. (Lab maintenance contractors).

Cy:
ER file

Addendum C:

McVey Report

Inter-Office Memorandum

WESTON
MANAGERS DESIGNERS/CONSULTANTS

TO: Cal Martell
MS E525

FROM: John Smith

DATE: February 6, 1992

PROJECT: LANL ER, TA-3

W.O. NO.: 2744-3133

SUBJECT: Availability of WESTON logbooks, site visit photos, and database reports for TA-3

ACTION:

I have confirmed with Mike McVey (WESTON-Albuquerque, 505-884-5050) that Weston log books (2) and site visit photgraphs were transferred to EM-13. Mike called Barry Drennon at EM-13 and Barry confirmed he had one logbook and the photgraphs available. Mike will provide a Xerox of his personal Xerox of the second logbook (Which Barry can not find). Mike confirmed that a partial database was prepared in FY89, and that Barry has copies of all three volumes (Release Site Database, Preliminary Draft, Tasks 19, 20, 21 for TA-3 and TA-59 dated 9/89).

Photo # 43

Mason shed - right next to 3-1979 (concrete, ~~adhesive~~, ceramic tile adhesive, dryvit - plaster)

3-1979 storage bldg. for grass seed

Photo # 44

3-225 Storage bays

1st bay - sand

2nd & 3rd bay - Salt

4th bay - storage plaster, ~~peat~~ peat moss, el ray stuko

[3-17-225]

Photo # 45

Reclamite storage (3-1969)

[3-3-73c]

- ~ 5,000 gal storage tank
- rejuvinating oil for asphalt
- no spills that Benito knows of
- no leaks in tank

Photo # 46

Gasoline storage tanks

[3-3-73a]

- left one on stand 500 gal (active one)

[3-3-73b]

- Right one 250 gal (inactive since 1987)
- Spills from tanks did occur onto soil

Ignatius D. [illegible] 77

rejuvinates asphalt
- tank can be pumped out into truck and tank cleaned w/ new emulsion fluid
- old emulsion fluid if not used on asphalt roads is drummed and disposed of to TA-54 (PAN AM does paper work) hot dump people come and get it.
- Evidence of large spills around tank and surrounding soil

Photo #50
- [3-3-75]
former site of oil asphalt storage tank
- asbestos lined tank
- totally cleaned out by asbestos people from PAN AM
- cut up by laborers at batch plant and taken to Los Alamos County landfill as approved by PAN AM environmentalists
- leaks did occur underground
- removed about 2 wks ago (3 wk April 1989)

 [illegible]

Photo #51

[3-3-76]

- same procedure as 75
- did leak
- removed in 1988 (October)
- 85 100 oil stored in both tanks 75 and 76
- reason for removing tank 76 was because it leaked. Excavated down and found that bottom had rusted out and leaked to soil (lost ~100-200 gallons). Transferred oil to other tank 3-75 and removed tank. All contam. soil was excavated from around tank. ~~Sort~~ Contam. soil was mixed w/ sand and hardened and taken to county landfill.
- area now used to heat up crack sealant machines. Hook up to steam at night and come in morning and oil is hot