

**Response to the “Notice of Disapproval for the Investigation Work Plan for  
Threemile Canyon Aggregate Area, Los Alamos National Laboratory (LANL),  
EPA ID #NM0890010515 HWB-LANL-08-016,”  
Dated September 23, 2008**

## INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department’s (NMED’s) comments are included verbatim. The comments are divided into general and specific categories, as presented in the notice of disapproval. Los Alamos National Laboratory’s (LANL’s or the Laboratory’s) responses follow each NMED comment. This response contains data on radioactive materials, including source, special nuclear, and byproduct material. Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to NMED in accordance with U.S. Department of Energy policy.

## GENERAL COMMENTS

### NMED Comment

1. *The Permittees must revise the sentence composition in each of the Scope of Activities sections to state: “X samples will be taken from the surface and subsurface at X locations” (e.g., “Eighteen surface and subsurface samples will be collected from nine locations ...” will be changed to “Eighteen samples will be taken from the surface and subsurface at nine locations...”)* for clarity. It is not clear in the original sentence if 36 samples or 18 samples will be taken in total.

### LANL Response

1. Where appropriate, the text in the scope of activities sections has been revised to indicate samples will be collected from the surface and the subsurface.

### NMED Comment

2. *The Permittees must rephrase the sentences in the Summary of Data sections to ensure the text is not misleading. The sentence structure indicates there are many contaminants in the same sample; however, this is not the case. For example Section 6.5.2.2, Summary of Data, for SWMU 15-008(b) states, “Arsenic, chromium, calcium, and nickel were detected above BVs in one sample.” The contaminants were found in multiple samples, with one constituent detected in each sample. The Permittees must revise their presentation of information in all Summary of Data sections.*

### LANL Response

2. Where appropriate, text in the summary of data sections has been revised to accurately reflect the data in the historical investigation report (HIR) tables.

### NMED Comment

3. *NMED identified several mistakes in presenting the same data in tables and text. The Permittees must ensure the text and associated tables correspond in the Summary of Data sections. For example Section 4.2.2, Summary of Data, for AOC 12-004(a), states, “Zinc was detected above BV in two samples.” Table 2.2-2 in the Threemile Canyon Aggregate Area HIR (HIR) shows zinc above the*

*BV in one sample. The Permittees must resolve discrepancies between the text and the reported values in the HIR.*

#### **LANL Response**

3. The text in sections 4.2.2, 6.1.2, and 7.2.2 has been revised. The remaining text has been checked to ensure all values in the work plan that refer to values reported in the HIR are consistent and correct.

#### **NMED Comment**

4. *The Permittees must discuss the rationale for borehole locations, sampling depths, number of samples and the analytical suites for laboratory analysis and revise Table 4.0-1, Proposed Sampling Description and Analyses, accordingly.*

#### **LANL Response**

4. The text has been revised and clarified for each proposed borehole to indicate the rationale for the locations, depths, samples, and analytical suites. Table 4.0-1 has also been revised accordingly to indicate sampling depths, number of samples, and analytical suites.

#### **NMED Comment**

5. *Section IX.B.2, Field Exploration Activities, of the March 1, 2005 Order on Consent (the Order) requires that "[t]he depths and locations of all exploratory ... borings shall be specified in the ... site-specific work plans..." The Permittees must discuss and provide a table of the proposed borehole depths.*

#### **LANL Response**

5. The proposed borehole depths are discussed in the scope of activities sections where appropriate. Proposed borehole depths are provided in Table 4.0-1. Samples will be collected from each borehole at the same depth intervals to 180 ft.

#### **NMED Comment**

6. *If contamination was detected in previous sampling, the proposed investigation must include the areas and depths previously sampled where contamination was detected and propose additional sampling to determine the lateral and vertical extent of contamination if it was not established in the previous work. For example, in Section 6.5.2.3, Scope of Activities, for SWMU 15-008(b), page 27; paragraph 2, the Permittees state: "Samples will be collected from two depths (0 to 0.5 ft and 2 to 3 ft) ... "However, according to Figure 4.5-4 and Table 4.5-2 in the Historical Investigation Report for Threemile Canyon Aggregate Area, July 2008 (HIR), contamination was found at 2.67 ft in previous sampling at the southern edge of SWMU 15-008(b) in an area associated with SWMU 15-006(c). The Permittees must propose sampling that will meet the objective to define the extent of the contamination and revise the text to reflect the changes.*

#### **LANL Response**

6. Proposed sampling locations extend beyond the areas and/or depths previously sampled at a site to define the extent of contamination. The proposed subsurface sampling depth at Solid Waste Management Unit (SWMU) 15-008(b) has been changed to 3 to 4 ft. In addition, proposed sampling at SWMU 15-008(b) extends beyond the site boundaries to define lateral extent. There were no other

discrepancies between relevant screening-level data and proposed sampling at other SWMUs or areas of concern (AOCs) discussed in the work plan.

#### **NMED Comment**

7. *The Permittees must include the dates of previous sampling and reference the HIR tables and figures that present the cited analytical data on Plan figures where site features are shown.*

#### **LANL Response**

7. The summary of previous investigations and summary of data sections for each site references the data tables and figures in the HIR that are relevant to the site being discussed. The text for each section also indicates when the data were collected for each site. The dates of sampling are provided with the data on compact disc included with the HIR and are indicated by the sample numbers presented in the HIR (e.g., 0215-95-0555 indicates the sample was collected in 1995). The figures in the work plan showing proposed sampling are presented in the format approved by NMED in previous work plans. No revisions to the figures in the work plan are necessary.

#### **NMED Comment**

8. *All figures provided in the Plan must include all applicable features and structures, underground utilities, and existing well and/or borehole locations. For example, locations of structures within AOCs 12-004(a) and 12-004(b) are described in detail in the text, but are not presented on Figures 4.2-1 or 4.2-2 as site features. Also, the Permittees must label "Redondo Road" on all figures where the road is depicted. The road is referenced in the text, but not labeled on any of the maps. Additionally, AOC C-12-004 appears to be labeled incorrectly (wrong building number) in Figure 4.1-1 and 4.1-2.*

#### **LANL Response**

8. All figures in the work plan included all underground utilities and existing well and/or borehole locations; these were labeled in the legends, as applicable. Some of the areas are located where water, sewer, gas, communication, or electricity is not connected or not in close proximity. Structure 12-8, the only existing structure at AOC 12-004(a), was added to Figures 4.2-1 and 4.2-2 and is discussed in sections 4.2 and 4.3 of the work plan. Redondo Road was also added to Figures 4.1-1, 4.1-2, 4.2-1, and 4.2-2. In Figures 4.1-1 and 4.1-2, the building number has been revised to 12-5.

#### **NMED Comment**

9. *Section IX.A, Standard Operating Procedures, of the Order requires a "brief description of investigation, sampling or analytical methods and procedures in documents submitted to the Department that includes sufficient data to evaluate the quality of the acquired data. The Respondents may reference relevant Standard Operating Procedures as presented on the LANL website. The reference should include the appropriate Internet address. "The Permittees must ensure that the websites referenced in the text are up to date with working links. For example on page 41, Section 8.0, Investigation Methods, the link does not work; in Appendix B-1, Section B-2.0, IDW, the links require a Z number and password to access the site. It is not appropriate to include links to internal websites in a public document.*

## LANL Response

9. The Internet address in section 8.0 has been checked and the link is verified as operational. The site is open to the public domain, and a Z-number and password are not required. The web address in Appendix B, Section B-2.0, has also been revised to allow access without a Z-number and password.

## NMED Comment

10. *Section XI.B.6.a, Surface Conditions, of the Order requires that a detailed description of "current site topography, features and structures including ...topographic drainages, manmade drainages, vegetation, erosional features, and basins, be included in the Plan. The Permittees must provide a description of the topography, vegetation, erosional features, manmade discharges, and structures or reference all applicable sections that describe such features.*

## LANL Response

10. Text has been added to section 3.1 discussing the topography, vegetation, and erosion for the Threemile Canyon Aggregate Area. Descriptions of man-made discharges and structures associated with the aggregate area sites are included in the site descriptions.

## SPECIFIC COMMENTS

### NMED Comment

#### 1. **Section 4.3.3, Scope of Activities for AOC 12-004(b), page 18; paragraph 1:**

*a. **Permittees' Statement:** "The pipe will be removed and disposed of at the appropriate waste facility."*

***NMED Comment:** The Permittees must describe how the pipe is to be characterized prior to disposal. NMED assumes that samples will be obtained following removal of the pipe; however, the Permittees must explain whether or not samples will be obtained prior to or following the removal of the pipe.*

*b. **Permittees' Statement:** "Samples will be collected from two depths (0 to 0.5 ft and 1 to 2 ft) and analyzed for TAL metals, total uranium, cyanide, perchlorate, SVOCs, HE, isotopic uranium, isotopic plutonium, americium-241, and gamma spectroscopy."*

***NMED Comment:** According to Section 4.3 of the Plan, the pipe was 3ft long and previous sampling found contamination at 2.5ft (HIR, Figure 2.2-2) in the area associated with this AOC. Therefore, at a minimum, proposed sampling must be 2 to 3 ft bgs and also include a 5 to 6 ft interval bgs as required by Section IX.B.2.b.i item 3 of the Order. The Permittees always must propose subsurface sampling beneath the deepest previously detected contamination.*

## LANL Response

1. a. The text in section 4.3 of the work plan has been revised to clarify how the galvanized pipe will be sampled and disposed of.  
b. Two additional samples have been added at depths of 5 to 6 ft, below the pipe.

The text in section 4.3.3 now reads as follows:

The pipe will be removed, swipe samples will be collected and analyzed for HE and radioactivity, and the pipe will be disposed of at an appropriate waste facility. Six samples will be collected from the surface and subsurface at two locations beneath the pipe (Figure 4.2-2). Samples will be collected from three depths (0 to 0.5 ft, 2 to 3 ft, and 5 to 6 ft) and analyzed for TAL metals, total uranium, cyanide, perchlorate, SVOCs, HE, isotopic uranium, isotopic plutonium, americium-241, and gamma spectroscopy. One of the four samples will be analyzed for PCBs. Table 4.0-1 summarizes the proposed sampling strategy, locations, depths, and analytical suites.

#### **NMED Comment**

##### **2. Section 5.1.3, Scope of Activities for AOC C-14-006, page 22, paragraph 1:**

**Permittees' Statement:** "Ten surface and subsurface samples will be collected from five locations within and bounding the footprint of the former building (Figure 5.1-2). Samples will be collected from two depths (0 to 0.5 ft and 2 to 3 ft) and analyzed for TAL metals, total uranium, cyanide, perchlorate, HE, and isotopic uranium, isotopic plutonium, americium-241, and gamma spectroscopy. Two of the 10 samples will be analyzed for PCBs."

**NMED Comment:** No previous sampling has been conducted at this site. Therefore analysis for the full analytical suite must be conducted. The Permittees must propose the full analytical suite for each sample or propose a subset of the total number of samples to be analyzed for contaminants that are less likely to be detected (e.g., dioxins, furans, VOCs). The Permittees must provide the rationale for the selections.

#### **LANL Response**

2. All samples will also be analyzed for nitrate, semivolatile organic compounds (SVOCs), and volatile organic compounds (VOCs). Dioxins and furans are not contaminants based on knowledge of the site's operations (i.e., an area of potential soil contamination associated with a former HE magazine). The text in section 5.1.3 and Table 4.0-1 have been revised accordingly.

#### **NMED Comment**

##### **3. Section 6.2.3, Scope of Activities for AOC 15-004(d), page 24, paragraph 2:**

**Permittees' Statement:** "Eight surface and subsurface samples will be collected from four locations bounding the site (Figure 6.1-2)."

**NMED Comment:** The Permittees must either move the proposed sampling locations or propose additional sampling locations to determine the lateral extent of contamination. Previous sampling indicates contamination beyond the currently proposed locations (comparing HIR Figures 4.1-2 and 4.1-3 to the Plan Figure 6.1-2). Revise the plan accordingly.

#### **LANL Response**

3. Figure 6.1-2, the text in section 6.2.3, and Table 4.0-1 have been revised to indicate the proposed sampling locations to define lateral extent at AOC 15-004(d) are beyond the historical sampling locations.

#### **NMED Comment**

##### **4. Section 6.5.2.3 Scope of Activities for SWMU 15-008(b), page 27; paragraph 2:**

**Permittees' Statement:** "Samples will be collected from two depths (0 to 0.5ft and 2 to 3 ft) and analyzed for TAL metals, total uranium, cyanide, perchlorate, HE, isotopic uranium, isotopic plutonium, americium-241, gamma spectroscopy and tritium."

**NMED Comment:** According to Figure 4.5-4 and Table 4.5-2 in the HIR, contamination was found at 2.67ft in previous sampling at the southern edge of SWMU 15-008(b) in an area associated with SWMU 15-006(c). The Permittees must obtain samples from intervals below the previously deepest detected contamination to determine the vertical extent of contamination.

#### **LANL Response**

4. The proposed subsurface sampling depth for SWMU 15-008(b) was changed to 3 to 4 ft in the text and Table 4.0-1.

#### **NMED Comment**

##### **5. Section 6.6.2.3, Scope of Activities for AOC 15-008(g), page 29, paragraph 1:**

**Permittees' Statement:** "Samples will be collected from two depths (0 to 0.5 ft and 2 to 3 ft) and analyzed for TAL metals, total uranium, cyanide, perchlorate, HE, isotopic uranium, isotopic plutonium, americium-241, gamma spectroscopy, and tritium."

**NMED Comment:** According to Figure 4.6-2 in the HIR, contamination was found to 3.42ft in an area associated with this AOC. The Permittees must obtain samples from intervals below the previously deepest detected contamination to determine the vertical extent of the contamination.

#### **LANL Response**

5. The contamination noted at 3.42 ft in sample 0215-05-0555 at location 15-03108 is not associated with or in close proximity to AOC 15-008(g). As indicated in Tables 4.6-1 and 4.6-2 of the HIR, this sample is associated with SWMU 15-006(d), deferred Firing Site R-45, and reflects the potential dispersion of materials from firing site activities. At AOC 15-008(g), a surface disposal area, only one sample collected is associated with this site (location 15-03136, sample 0215-95-0624) as indicated in Tables 4.6-3 and 4.6-4 in the HIR. This site will not be characterized by a sampling location approximately 40 ft away. Therefore, the proposed surface and subsurface sampling locations presented in Figure 6.6-2 in the work plan for AOC 15-008(g) are designed to provide the lateral and vertical extent of the contamination associated with the disposal area previously located at this site. No revisions to the text, figure, and Table 4.0-1 are necessary.

#### **NMED Comment**

##### **6. Section 6.7.1.3 and Section 6.7.2.3 Scope of Activities, page 30, paragraph 1 and paragraph 2:**

**a. Permittees' Statement:** "The sampling intervals will be staggered for each borehole such that one sample is collected every 15 ft within a single borehole but every 5 ft collectively from the three boreholes."

**NMED Comment:** Samples must be obtained from discrete intervals in each boring. The Permittees must sample all borings from the same intervals so that comparable data are acquired. The Permittees must include the proposed sampling intervals in Table 4.0-1.

**b. Permittees' Statement:** "A total of 36 subsurface samples will be collected from three boreholes bounding an approximate 50-ft radius from the shaft (Figure 6.7-2). The target depth of each borehole will be 180 ft bgs. Samples will be collected from 12 depths at 15-ft intervals from each borehole and analyzed for TAL metals, cyanide, perchlorate, HE, and tritium."

**NMED Comment:** No previous sampling has been conducted at these sites. Therefore analysis for the full analytical suite must be conducted. The Permittees must complete full analytical suite analyses for each sample or propose a subset of the total number of samples to be analyzed for contaminants that are less likely to be detected (e.g. dioxins, furans, VOCs). The Permittees must provide the rationale for the selections.

### LANL Response

6. a. The sampling intervals have been revised in Table 4.0-1, so comparable data are collected from each borehole.
- b. At these sites, only one experiment was conducted in each shaft, and either only HE or only HE, tritium, and beryllium were used in the experiment. Text has been added to sections 6.7.1.3 and 6.7.2.3 to indicate what the experiment used to justify the limited analytical suites proposed. Therefore, full suite analyses are not appropriate.

### NMED Comment

#### 7. Section 6.8.3, Scope of Activities for SWMU 15-009(b), page 31:

**Permittees' Statement:** HIR Figure 4.6-2 and Plan Figure 6.6-2

**NMED Comment:** The Permittees must either move the proposed sampling locations or propose additional sampling locations. Previous sampling indicates contamination beyond the currently proposed locations (comparing HIR Figure 4.6-2 and the Plan Figure 6.6-2). Revise the Plan accordingly.

### LANL Response

7. The contamination noted in the above comment in Figure 4.6-2 of the HIR beyond the currently proposed sampling in Figure 6.6-2 of the work plan is not associated with SWMU 15-009(b). Sampling locations 15-03130 and 15-03134 are associated with SWMU 15-006(d), deferred Firing Site R-45, and indicate the potential dispersion of materials from firing site activities, as presented in Tables 4.6-1 and 4.6-2 of the HIR. SWMU 15-009(b) is a septic tank, seepage pit, drainline, and outfall and is not associated with previous sampling locations approximately 30 ft or more from the associated structures and drainage. As discussed in section 6.8.1 of the work plan, no sampling has been conducted at SWMU 15-009(b). Therefore, the proposed surface and subsurface sampling for SWMU 15-009(b) presented in Figure 6.6-2 of the work plan is designed to define the extent of contamination associated with the septic system. No revisions to the text, figure, and Table 4.0-1 are necessary.

## NMED Comment

### 8. Section 7.2.3, Scope of Activities for SWMU 36-003(a); page 39, paragraph two:

**Permittees' Statement:** "Ten samples will be collected from five locations within and bounding the drain field (Figure 7.2-2). Samples will be collected from two depths (base of the drainline and 5ft below the base of the drainline) and analyzed for TAL metals, total uranium, cyanide; nitrate, perchlorate, VOCs, SVOCs, HE, isotopic uranium, isotopic plutonium, americium-241, gamma spectroscopy, and tritium."

**NMED Comment:** Table 4.0-1, Proposed Sampling Description and Analysis, provides contradictory information to the above statement. The table shows the depth of sampling to be "Soil/tuff interface, 5 ft below soil/tuff interface." The Permittees must clearly state where the samples are to be collected and revise the text and table accordingly.

## LANL Response

8. Table 4.0-1 has been revised to indicate samples will be collected at the base of drainline and 5 ft below the base of drainline, as stated in the text.

## NMED Comment

### 9. Section 8.3.2, Subsurface Samples, page 43

**NMED Comment:** The Permittees must discuss the decision making process to be used if contamination is detected by field screening of hand auger samples at the bottom of the borehole and there is a need to extend the borehole beyond the depth proposed in the Plan.

## LANL Response

9. Field screening will be used to guide sample collection. Samples will be collected from boreholes at the depths indicated in the work plan. If field screening indicates that contamination is present at the bottom of the borehole, the hand-auger borehole will be extended until field screening indicates no contamination or until refusal occurs. The text in section 8.3.2 has been revised to reflect this approach.

## NMED Comment

### 10. Section 8.4, Field-Screening Method, page 44, paragraph one:

**Permittees' Statement:** "The primary field-screening methods to be used on subsurface core include (1) visual examination and (2) radiological screening."

**NMED Comment:** The Order, Section IX.B.2.d, Soil, Rock, and Sediment Sample Field Screening, states the "primary field screening methods to be used are: (1) visual examination; (2) headspace vapor screening for VOCs; and (3) metals screening. Additional screening for site or release specific characteristics shall be conducted where appropriate." The Permittees must discuss why all Order-required field screening methods are not being utilized.



## LANL Response

10. The sentence in section 8.4 has been revised to read, "The field screening to be conducted on subsurface core includes (1) visual examination and (2) radiological screening." Radiological field screening is proposed because radiological contamination is likely to be collocated with inorganic chemical contamination and x-ray fluorescence (XRF) detection limits are not sufficiently low for most inorganic chemicals. Thus, XRF is not useful for field screening to determine the extent of contamination, and radiological field-screening instruments are more likely to detect contamination. Samples collected based on radiological field-screening results will be submitted for inorganic chemical analyses. No VOC contamination is expected based on the site history and historical documentation. Therefore, field screening for VOCs is not proposed. The text in section 8.4 has been revised to clarify this approach.

## NMED Comment

### 11. Section 8.7, Equipment Decontamination, page 45, paragraph one:

**Permittees' Statement:** "Drilling/exploration equipment that may come in contact with the borehole will be decontaminated by steam cleaning, by hot water pressure washing, or by another method before each new borehole is drilled."

**NMED Comment:** In the IDW discussion (Appendix B-2.6) and Table 8.0-1, Summary of Investigation Methods, the preferred method is dry decontamination. The Permittees must describe this method of decontamination and revise the text and tables so they are consistent.

## LANL Response

11. Sections 8.7 and B-2.6 of Appendix B have been revised to reflect the use of dry methods for decontamination. The summary of field decontamination of drilling and sampling equipment in Table 8.0-1 is standard summary text and has not been revised.

## NMED Comment

### 12. Section 8.9.1, Removal of Septic and Settling Tanks, page 46, paragraphs two, three and four:

a. **Permittees' Statement:** "Each septic or settling tank will be located and soil, fill, or other material covering the tank will be excavated and stockpiled next to the excavation" and "[t]he excavated area will then be backfilled with clean fill and material excavated from the surface of the tank."

**NMED Comment:** The Permittees must sample all overburden material if its intended use is backfill. Soil used as backfill must not exceed residential soil screening levels (SSLs).

b. **Permittees' Statement:** "Potentially contaminated soil beneath the tank will be excavated, characterized and disposed of at an appropriate waste disposal facility," and "Once the tank has been removed, confirmation samples will be collected beneath the inlet and outlet of each tank and from below the tank."

**NMED Comment:** The Permittees must describe the criteria used to determine the extent of excavation and the estimated depth of the excavation. The Permittees must clarify that confirmation samples will be collected after the potentially contaminated soil is excavated.

## LANL Response

12. a. Each septic or settling tank will be located, and soil, fill, or other material covering the tank will be excavated. The excavated material will be field screened during the excavation process and will remain within the SWMU boundary from which it was excavated. If field screening does not indicate contamination is present, the excavated material will be stored on the ground surface with appropriate best management practices. If field screening indicates the presence of contamination, the excavated material will be placed in rolloff containers and disposed of accordingly. At least one sample will be collected for every 50 yd<sup>3</sup> of material excavated and submitted for laboratory analyses of target analyte list (TAL) metals, nitrate, cyanide, perchlorate, VOCs, SVOCs, high explosives (HE), isotopic uranium, isotopic plutonium, americium-241, gamma spectroscopy, and tritium. The analytical results will be compared to the residential soil screening levels (SSLs). The excavated material will be used as backfill if concentrations are below the residential SSLs and disposed of properly if concentrations exceed the residential SSLs. The text in section 8.9.1 has been revised to reflect this approach.
- b. The text has been revised to indicate visual observations and field screening will be used to guide sampling to determine the extent of contamination and to guide collecting confirmatory samples. If visual observations or field screening indicate contamination, the excavation will be extended (either vertically or laterally) as necessary. Excavation will continue until visual observations and field screening indicate that contamination is no longer present. Confirmatory samples will be collected, analyzed, and evaluated to verify contamination has been removed before the excavation is backfilled.

## NMED Comment

### 13. Section 10.0, Schedule, page 47:

**Permittees' Statement:** "The scheduled notice date for NMED to approve this investigation work plan is November 28, 2008. Preparation for investigation activities is scheduled to start on December 3, 2008. Fieldwork is expected to start in early April 2009 and will take approximately 7 mo to complete. Fieldwork is scheduled to be complete by November 2009. The investigation report will be delivered to NMED on or before November 2010."

**NMED Comment:** The Permittees must submit the IR no later than May 31, 2010; six months after completion of fieldwork.

## LANL Response

13. Due to fiscal year (FY) 2009 funding as well as the extent and volume of sampling being proposed, it is unlikely that this project can be funded in FY2009. Therefore, LANL respectfully requests an extension to August 31, 2010, for the submittal date of the investigation report. Should funding become available earlier in FY2009, LANL will make every attempt to meet the original scheduled date of May 31, 2010. The text has been revised to reflect the requested August due date.

## NMED Comment

### 14. Table 4.0-1, Proposed Sampling Description and Analysis, pages 91-100:

**NMED Comment:** The Permittees must revise Table 4.0-1 to include a column (or columns) which provide the rationale for sampling depths, proposed laboratory analyses and the estimated depth of the soil borings.

## LANL Response

14. The text in the scope of activities sections for each site presents the rationale for the proposed sampling and analyses, including the number of samples and sampling depths. Table 4.0-1 summarizes what is presented in the text and includes the proposed laboratory analyses, sampling depths, and the number of samples to be collected. This presentation conforms with similar tables in previously approved work plans. No revisions to the text and Table 4.0-1 are necessary.

## NMED Comment

### **15. Table 8.0-1, Summary of Investigation Methods, pages 101-102:**

**NMED Comment:** *The Permittees must revise Table 8.0-1 to include corresponding SOP numbers.*

## LANL Response

15. Table 8.0-1 uses the same format presented in previously approved work plans. Standard operating procedure (SOP) numbers are not included in the table because previously NMED indicated LANL should not include SOP numbers in this summary table. The referenced website provides the current versions of the applicable SOPs.

## NMED Comment

### **16. Appendix B, Section B-2.2, Excavated Environmental Media, page B-2, paragraph 2:**

**Permittees' Statement:** *"Most of the overburden soil and rock excavated above sumps and piping are expected to be noncontaminated. In areas where no evidence (e.g. broken pipes, stains, or odors) of contamination is found, the overburden soil will be stockpiled or containerized for reuse as fill in the area from which it was excavated."*

**NMED Comment:** *The Permittees must sample all overburden material if its intended use is backfill. Soil used as backfill must not exceed SSLs.*

## LANL Response

16. The text has been added to Appendix B to include the sampling of excavated material and the criteria used for returning the material to the excavation area as backfill or for disposal off-site.

## NMED Comment

### **17. Appendix B, Table B-1.0-1, Summary of Estimated IDW Generation and Management, page B-5:**

**NMED Comment:** *The Permittees must provide an estimate of the volume of waste generated for each waste stream and revise Table B-1.0-1 to include the estimates.*

## LANL Response

17. Table B-1.0-1 should have been numbered Table B-2.0-1 in the original work plan. The correct table number is provided in the revised work plan. The table has also been revised to include the estimated volumes of anticipated waste streams.