



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 6
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 DALLAS, TX 75202-2733

LANL

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CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Mr. Joseph C. Vozella, Chief
 Environment, Health and Safety Branch
 Department of Energy
 Los Alamos Area Office
 Los Alamos, New Mexico 87544

Re: Notice of Deficiency, Operable Unit 1093
 Los Alamos National Laboratory, NM0890010515

Dear Mr. Vozella:

The Environmental Protection Agency (EPA) has reviewed the Resource Conservation and Recovery Act (RCRA) Facility Investigation Work Plan for Operable Unit 1093 and found it to be deficient. Enclosed is a list of deficiencies for which a response is required to the specific comments within thirty days from receipt of this letter. EPA has reviewed the units for which no further action was requested and determined that none of these units need to be added to the HSWA portion of the permit for investigation.

Should you have any questions, please contact Barbara Driscoll at (214) 655-7441.

Sincerely,

William K. Honker

William K. Honker, P.E.
 Chief
 RCRA Permits Branch (6H-P)

cc: Benito Garcia, NMED
 Dave McInroy, LANL EM-13



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List of Deficiencies

General Comments:

1. The format used in this work plan would be improved if the SWMU description and history were followed by the sampling plan.
2. In Table 4-5 on page 4-29 the proposed radiological screening action levels for soils are all comparable to or substantially less than the detection limits for the mobile laboratory. From the information presented, it appears that at this time the mobile laboratories can not be used for soil or water screening for radioactive constituents, and that a determination of NFA for radioactive materials could not be made based on mobile laboratory data.
3. All risk assessment land use scenarios should be consistent with those agreed upon by EPA and NMED until appropriate input has been received from the public.
4. An examination of ground water monitoring issues at LANL, including the presence or absence of a perched-intermediate zone beneath Pajarito Canyon will be examined by EPA and the New Mexico Environment Department, and a document noting deficiencies and requirements will be issued separately.

Specific Comments:

1. LANL shall provide a sampling and report schedule for this work plan.
2. **4.2.3 Voluntary Corrective Actions, p. 4-4** - Voluntary corrective actions (VCAs) which are conducted at solid waste management units (SWMUs) which are required to be investigated under the HSWA portion of the permit will require EPA review and approval. If the VCA is the final remedy, then it is EPA's responsibility to select the cleanup level and approve the final remedy after public comment. LANL shall make the appropriate changes to their text for this section of the work plan following EPA guidance.
3. **4.2.4 Active PRSs, p. 4-6** - Final investigations of active sites will not be deferred without EPA approval. Following the initial investigations detailed in this work plan, EPA will make a determination what if any additional work should be implemented regarding active sites. LANL shall note this in their work plan.
4. **4.4.1 Criteria for No Further Action, p. 4-17** - Criterion 3 should be changed to read "The risk, as determined by a baseline risk assessment, is less than 10^{-6} for carcinogens...".

5. **4.5.1.3 Statistical Basis for Sampling Strategies, p. 4-20** - What is the basis that LANL will use in making the assumption as to what fraction of the area is potentially contaminated, and how will LANL ensure that the assumptions made in relation to "f" are consistent?

6. **4.5.1.4 Sampling Strategy for Septic Systems, p. 4-22** - Text indicates that Phase I investigations of active septic systems will be designed to estimate the current risk associated with the systems by comparing measured surface soil concentrations of potential contaminants of concern against screening action levels, or by conducting a baseline risk assessment. For any septic system the primary contaminants of concern should be in the subsurface and not at the surface; therefore, a baseline risk assessment of surface soils will not be adequate for a determination of NFA. The extent of contamination would need to be addressed. In addition, the history and potential for contamination of any septic system, not whether the site is active or not, will be considered when EPA determines if additional sampling will be required.

7. **4.5.2 Sampling Methods, p. 4-27** - LANL shall explain the rationale and necessity for increasing the quality control samples from 1 in 20, as recommended in the QAPjP, to 1 in 10. Unless this increase in the number of quality control samples is consistent with standard practices then it does not seem necessary in view of budgetary constraints. In addition, if the number of quality control samples as outlined in the QAPjP is not adequate then possibly the QAPjP should be revised. The purpose of LANL having a general QAPjP is for maintaining consistency in sampling and analysis.

8. **4.6.1 Field Surveys, p. 4-27** - The list of SOPs which have not been formally adopted by the Environmental Restoration program should be replaced by those standard SOPs as they become available. LANL shall expedite all SOPs related to field sampling and surveys.

9. **4.6.3 Analytical Laboratory Methods, p. 4-32** - LANL indicates that Table 4-5 includes all of the potential contaminants (metals and radionuclides) and most of the VOCs and SVOCs potentially found at TA-18 and TA-2. LANL shall provide a list of the VOCs and SVOCs whose potential presence can be inferred from the reported use of solvents at the site but were not included in Table 4-5.

10. **5.1.5.1.1 Phase I Sampling, p. 5-29** - The number of manholes to be sampled (12) shown in Figure 5-8 does not match the number of samples to be collected in Table 5-4 (11). LANL shall clarify how many manholes are to be sampled.

11. **5.1.5.2.1 Active Septic Systems, p. 39** - Soil samples collected for the drain field investigations should be taken at least as deep as the outfall pipe, if the outfall pipe is deeper than 0-6 inches.

12. 5.1.5.4.2 SWMUs 18-012(a) and (c) - Outfalls, p. 5-45 - Do these active outfalls have NPDES permits?

13. 5.2 PRS Aggregate "B" - AOC 18-008 - Underground Storage Tank, p. 5-46 - This unit is not required to be sampled under the HSWA permit. Sampling should be a low priority based on funding, or should be funded with monies specified for UST work.

14. 5.3.5.1.2 Sampling in Area Surrounding Firing Points, p. 5-60- LANL shall revise the proposed sampling locations so that the overlapping areas outside the actual firing points will be preferentially sampled.

15. 5.3.5.2 AOCs 18-005(a) Magazine and 18-011 Generator Building, p. 5-63 - AOC 18-011 is the site of a possible one-time spill which was previously addressed. Any sampling for this area should be conducted after all the SWMUs in the permit have been addressed.

16. 5.4 PRS Aggregate "D" for A-18 - Storm Sewer Outfalls, p. 5-63- These storm sewer outfalls do not meet the definition of a SWMU, and as such should not be sampled under the HSWA portion of the RCRA permit.

17. SWMUs 27-001 and SWMU 18-007 should be low priority for investigation, as the potential for a release from these units is unlikely. There is no evidence that there is any hazardous waste associated with the military tank (SWMU 18-007) this site is not considered a SWMU, and LANL should request a Class III permit modification for removal of this unit from the permit.

18. 5.7.2 Sampling Plan, p. 5-87 - LANL shall modify the sampling of the wetland sediments so that 4 of the 32 samples collected are collected from a depth of 1-6 inches.