

MEMORANDUM

LANL

To: Barbara Hoditschek, Manager  
NMED/RCRA Permits

CONFIDENTIAL

Ed Horst, Manager  
NMED/RCRA Compliance/Technical Section

Through:  Bruce Swanton, AIP POC/LANL

From: Danny Katzman, AIP/LANL

Date: May 27, 1993

Re: Review of LANL's Revised Operable Unit 1079, TA-10 (Bayo Canyon)  
Subsurface Sampling Plan, submitted March 1993.

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The Hazardous and Radioactive Materials Bureau (HRMB) Agreement in Principle (AIP) staff have completed the review of the Revised Operable Unit (OU) 1079, former TA-10, Subsurface Sampling Plan. The revised Work Plan was submitted in response to a determination by LANL that the VMAX concept would not be as applicable to the TA-10 investigation as was originally thought. VMAX is the concept of feasible maximum volume to remediate through a removal action rather than extensive characterization. The revised Work Plan proposes to characterize known and possible plumes and areas of known residual contamination. This memo details AIP comments on the Work Plan. The AIP Program is submitting these comments and technical recommendations to the HRMB's RCRA Permitting and Enforcement/Technical Programs for their consideration since New Mexico is likely to receive HSWA authorization in the future.

**General Comments**

1. How were background levels for Uranium and Strontium determined for Bayo Canyon?
2. A map showing SWMUs and associated SWMU numbers should be included in the revised version of the Work Plan.

**Specific Comments**

1.1.1 p2

The possible use of institutional control as an "alternative action" to



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The possible use of institutional control as an "alternative action" to remediation is not recommended based on the potential for transport of contaminants offsite via the alluvial pathway.

1.1.5 p1 (page R1-5)

This section appears to state that screening assessments conducted at the outer points of a sampling array will be used to determine whether the extent of COCs has been bounded. The extent of contamination should only be determined with the use of laboratory analytical data.

1.1.6

No explanation of the use of arrays, rather than simple cartesian grids, is provided in the Revised Work Plan. In several examples, key locations (e.g. Array 3, northeast quadrant) are not proposed for sampling.

Table 1.4-1 and 1.4-2

All samples should be analyzed for metals using EPA SW-846 method 6010 to include beryllium and lead, rather than the TAL list. The assumption that lead and beryllium will behave in a manner consistent with barium has not been demonstrated and should not be applied.

M E M O R A N D U M

To: Barbara Hoditschek, Manager  
NMED, RCRA Permits Program

Edward L. Horst, Manager  
NMED, RCRA Technical Section

Through: Bruce Swanton, AIP POC/LANL

From: Danny Katzman, AIP/LANL

Date: May 27, 1993

Re: **AIP Comments on EPA's NOD on the Revised Operable Unit 1079, TA-10  
(Bayo Canyon) Subsurface Sampling Plan.**

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This memo discusses specific comments found in the EPA Notice of Deficiency on the OU 1079, TA-10 Revised Subsurface Sampling Plan, dated May 6, 1993 and addresses differences in the AIP's recommended technical or programmatic approaches.

1. NOD Comment 1.

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EPA Region 6 is presently requiring that baseline risk assessments (human-health and/or ecological) be conducted **within** the CMS phase, rather than **between** the RFI and CMS phases as is being proposed in LANL's Environmental Restoration Program. In our opinion, this appears to be a costly requirement driven by a procedural requirement and not technical merit. The timing of a risk assessment should be driven by the availability of appropriate data with which to conduct the risk assessment, i.e. after an effective RFI characterization is complete. This type of streamlined approach could prevent unnecessary delays in remediation efforts or No Further Action proposals at SWMUs.

Region 6 is currently developing its regional position on this issue. The policy will apply to all facilities in the region. Given that the RCRA/HSWA objective is to assure that contaminated sites are adequately addressed with regard to protection of the environment, I believe this objective could be more efficiently achieved using the streamlined approach discussed here.

In recent discussions with Barbara Driscoll, EPA Region 6 RCRA Permits Section, she expressed that a formal NMED comment on this issue would be useful in assisting Region 6 in its final decision.

2. NOD Comment 2.

It has not been conclusively determined whether VOCs remain as a significant contaminant in the many historic release areas at LANL, however, I do not believe that there is a need to analyze every collected sample for VOCs. A subset of samples in areas likely to have received VOC contamination (i.e. areas of visible staining) would address the problem. In addition, field screening could be used as a guide for the determination of which samples should be laboratory analyzed for VOCs. Several studies have shown that laboratory analyses conducted on sediment/soil samples show consistently lower values than non-intrusive soil-gas sampling methods.