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Date: August 18, 2000
 Refer to: ER2000-0431

Mr. John Kieling
 NMED-HWB
 P.O. Box 26110
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SUBJECT: SUBMITTAL OF RESPONSE TO REQUEST FOR SUPPLEMENTAL INFORMATION (RSI) FOR THE VOLUNTARY CORRECTIVE ACTION (VCA) PLAN FOR POTENTIAL RELEASE SITE (PRS) 03-056(c)

Dear Mr. Kieling:

Enclosed are three copies of the Los Alamos National Laboratory (LANL) Environmental Restoration Project's Response to your RSI on the VCA Plan for PRS 03-056(c). This PRS is listed on Table A of the Hazardous and Solid Waste Amendments Module of LANL's Hazardous Waste Facility Permit. The RSI was received at the ER Project Office on July 21, 2000.

If you have any questions, please call Dave McInroy at (505) 667-0819 or Joe Mose at (505) 667-5808.

Sincerely,

Julie A. Canepa, Program Manager
 Los Alamos National Laboratory
 Environmental Restoration

Sincerely,

Theodore J. Taylor, Program Manager
 Department of Energy
 Los Alamos Area Office

JC/TT/NR/ev

Enclosure: Response to RSI

Hswa LANL 1/1114/3 / 3-056(c)



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XU

Mr. John Kieling
ER2000-0431

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August 18, 2000

Cy (w/enc.):

M. Buksa, E/ET, MS M992
G. Lopez Escobedo, E/ET, MS M992
J. Mose, LAAO, MS A316
D. Neleigh, US EPA (2 copies)
N. Riebe, E/ET, MS M992
T. Taylor, LAAO, MS A316
J. Davis, NMED-SWQB
J. Parker, NMED-DOE OB
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**RESPONSE TO REQUEST FOR SUPPLEMENTAL INFORMATION (RSI)
FOR VCA PLAN FOR POTENTIAL RELEASE SITE 03-056(c)**

This document responds to a letter regarding "Request for Supplemental Information VCA Plan for Potential Release Site 03-056(c), Los Alamos National Laboratory, NM0890010515 HRMB-LANL-99-006" dated July 7, 2000, from the New Mexico Environment Department (NMED) Hazardous Waste Bureau (HWB) to the Los Alamos National Laboratory (LANL) Environmental Restoration (ER) Project. To facilitate review of this response, NMED's comments are included verbatim below. LANL's responses follow each NMED comment.

Specific Comments

1. *Page 1, Section 1.1, Purpose and Scope, paragraph 1:*

LANL Statement: "Install run-off control structures to mitigate the possibility of residual PCBs (if present) leaving the remediated area"

HWB Comment: *In addition to run-off control structures in the drainages, LANL should install run-on control structures on the mesa top to divert any storm water from entering the drainages if this has not already been done. If residual contamination remains (>1ppm for PCBs), LANL should also provide a viable schedule for maintaining the run-on and run-off control structures.*

LANL Response:

Run-on control structures on the mesa top have been constructed to divert storm water from entering the drainages. The run-on controls installed include diversion of the ruff drain from building TA-3-223. Run-on and run-off controls are planned as part of the site restoration and include installation of new asphalt, new curb, replacing fence, etc. The level of controls that will be constructed will be designed based on the levels of contamination remaining on the site after the cleanup and the location of the contamination if any.

2. *Page 3, Figure 1.0-2, PRS 03-056(c) including North Slope, West Slope, and ephemeral drainages:*

HWB Comments: *LANL should define the PRS boundary on the figure and describe it in the text in the VCA completion report.*

LANL Response:

As requested by NMED, A well-defined PRS boundary will be provided in a figure and text in the PRS 3-056(c) VCA Report.

3. *Page 14, Section 4.1.3.1 Potential Human Health Exposure to Receptors:*

LANL Statement: "Because of the low levels of PCBs at PRS 03-056(c) and the fact that PCBs are not easily released from soils, dermal exposure is not included. Its contribution to exposure would be at least one order of magnitude less than exposure from inhalation or ingestion."

HWB Comments: Dermal contact with soil contaminated with PCBs is one of the most important routes of PCB entry into the human body. LANL should evaluate dermal exposure and use HWB's PCB position paper for guidance.

LANL Response:

LANL will evaluate the dermal exposure pathway as part of the assessment in the PRS 3-056(c) VCA Report.

4. Page 20, section 4.3.3 Removal Activities, paragraph 4:

LANL Statement: "If the refined volume estimates significantly increase from that originally expected (900 yd³), a completion strategy will be developed based on the following criteria:

- Prioritization of the removal of material in areas of higher concentration
- Characterizing the extent of soil and tuff containing greater than 1 ppm PCBs and possibly doing a risk assessment to calculate remaining residual risk
- Estimating the volume of material remaining on site"

HWB Comments: LANL should make every effort to remove all soil that has greater than 1 ppm of PCBs. However, HWB understands that the excavation of tuff with PCBs greater than 1 ppm may not be feasible because it will have little cost benefit and there is acceptable risk with the remaining levels. The completion strategy that is discussed in this section should focus on only the tuff. LANL should also have a contingency plan to address further investigation/remedial activities if the site fails the risk assessment.

LANL Response:

LANL will make every effort to remove all soil at PRS 3-056(c) that is greater than 1 ppm PCBs. As discussed during a meeting with NMED on April 28, 2000 communication with NMED during the cleanup effort will ensure that NMED is consulted with respect to any contamination greater than 1 ppm that is left on the site. LANL will work with NMED in developing a contingency plan, if necessary, as the cleanup effort progresses. In addition, to meet an EPA TSCA request, a risk based cleanup level is being developed for the site, and will be submitted in a Notice to EPA-TSCA and NMED by August 31, 2000. Although, the proposed risk based cleanup level will be greater than 1 ppm, it is the intent of this corrective action to remove all loose soils with concentrations greater than 1 ppm, and ensure that any remaining contamination is not a hazard to human health or the environment.

5. Page 23, Section 5.0 confirmatory Sampling, paragraph 1:

LANL Statements: "Sampling will be performed to verify that....there is an acceptable human health risk to an industrial worker and an acceptable ecological risk"

HWB Comments: If LANL is going to request no further action at this PRS, LANL needs to use a residential scenario in its risk assessment in addition to the industrial worker scenario. According to current NMED's Office of General Council opinion, HWB will not be issuing NFA determinations for sites that are not assessed using a residential scenario.

LANL Response:

The Environmental Restoration (ER) Project conducts an assessment of human health based on a residential exposure scenario on all sites that have had chemicals of potential concern (COPCs) identified as a result of a release. This baseline assessment as outlined in the current Installation Work Plan (IWP) for the ER Project (LANL 2000, 64361.4) is performed regardless of the actual current and future land use and potential receptors at a site. Human health screening action levels (SALs) are derived for all COPCs according to the process described in Appendix C of the current IWP (LANL 2000, 64361.4). The SALs are calculated using the most current available human health toxicity data, standard default values, algorithms, and equations. The parameters and equations used to calculate the SALs are equivalent to those presented in EPA Region 6's Human Health Medium-Specific Screening Levels (EPA 1999, 64637). The SALs are equivalent to a 10⁻⁶ risk level for carcinogens and a hazard quotient of 1.0 for noncarcinogens. If the concentration of a COPC does not exceed its SAL, an assumption of no risk or hazard is made and no further action is required. If the concentration of a COPC exceeds its SAL, then further evaluation is necessary. Subsequent evaluation may include a baseline risk assessment under a residential or site specific scenario, if appropriate, or may involve a screening or baseline risk assessment using a more realistic exposure scenario, e.g., industrial or recreational. The results of the additional evaluation may be a decision that no further action is needed or may conclude that remediation is warranted. Cleanup levels derived for any site requiring remediation will be protective of human health and the environment and based on the appropriate exposure scenario.

For potential release site (PRS) 03-056(c), the potential risk for a resident will be evaluated following the removal of PCB contaminated soil. The risk assessment (screening and/or baseline) will be based on the levels of PCBs that remain at the site. Because this site is not appropriate for residential use (steep slope into canyon), the results of the assessment will be used for comparison purposes only. Any decisions regarding additional action will be based on the potential risk to human health from likely current and future land uses, which in the case of this PRS is continued Laboratory use (i.e., industrial exposure scenario on mesa top with limited site specific worker exposure on the hill slope).

6. Page 30, Section 7.0 Proposed Schedule and Uncertainties

HWB Comments: *Per our meeting on April 28, 2000, LANL is proposing to perform all remediation activities under HSWA Corrective Action and to perform all waste disposal activities under TSCA. LANL's proposed schedule needs to account for waste storage time restraints imposed before disposal occurs. Under TSCA, the PCB remediation waste can be stored for 180 days and is subject to several conditions (40 CFR 761.65(c)(9)). Under RCRA, the listed hazardous constituent (PCE) would cause the waste to fall under the 90-day storage requirement. LANL needs to identify in its plan how the waste will be handled during storage and obtain prior approval.*

LANL Response:

A waste characterization strategy form (WCSF) has been completed and submitted for approval at LANL. The strategy presented in the WCSF is to manage the waste in a <90-day storage area awaiting waste characterization then profiling the waste according to the analytical results and disposing of the waste appropriately. LANL is aware that even if we have a 180 day window for storage of PCB remediation waste, that the potential for RCRA Hazardous waste to be present requires us to manage the waste as hazardous.

7. *Appendix B, PRS 3-056(c) Voluntary Corrective Action Fact Sheet*

HWB Comment: *The erosion matrix score is listed as 52.6 but on page 13 (section 4.1.2, paragraph 2) it is listed as 69.7. Please correct the discrepancy in the final report.*

LANL Response:

The discrepancy noted by NMED will be corrected in the VCA Report.