



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous & Radioactive Materials Bureau
2044 Galisteo Street
P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-1557
Fax (505) 827-1544



PETER MAGGIORE
SECRETARY

File

Union Hunt 1/10/21

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 22, 1999

Mr. Theodore Taylor, Area Manager
Los Alamos Area Office-Department of Energy
528 35th Street
Los Alamos, New Mexico 87544

Dr. John C. Browne, Director
Los Alamos National Laboratory
P.O. Box 1663, MS-A100
Los Alamos, NM 87545

RE: Request for Supplemental Information Regarding the Voluntary Corrective Measure Plan for Consolidated Potential Release Site 21-027(d)-99 (Non-Traditional In Situ Vitrification), Los Alamos National Laboratory (NM0890010515)

Dear Mr. Taylor and Dr. Browne:

The Hazardous and Radioactive Materials Bureau's (HRMB) RCRA Permits Management Program has reviewed the Los Alamos National Laboratory (LANL) Voluntary Corrective Measure (VCM) Plan for Consolidated Potential Release Site (PRS) 21-027(d)-99 and is requesting supplemental information. The VCM Plan for PRS 21-027(d)-99 is dated April 9, 1999 and is referenced by EM/ER: 99-079 and LA-UR-99-1613. Attached is a list of comments and concerns regarding the VCM Plan.

HRMB has also reviewed and has no comments regarding the submittal of Appendix A, Ecological Scoping Checklist and Appendix B, Surface Water Assessment for the VCM Plan for consolidated PRS 21-027(d)-99, dated May 11, 1999 and referenced by EM/ER: 99-122. These appendices should be referenced with the VCM Plan for this consolidated PRS in all future correspondence.

In addition, HRMB approves of subsequent modifications to the VCM Plan for 21-027(d)-99 dated June 4, 1999 and referenced by EM/ER:99-146. The modifications resulted from additional staining and elevated gross beta concentrations found during the excavation of the vitrified product. A telephone log dated June 10, 1999 between Paula Bertino of LANL and John Young of HRMB will suffice to record HRMB concerns regarding the elevated gross beta activities discovered in samples acquired during pre-melt sampling. The phone log records agreements



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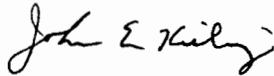
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between LANL and HRMB for including additional sampling parameters due to the apparent lack of understanding regarding the possible contamination at this PRS/area. The analytical suite now includes total petroleum hydrocarbons (diesel end), semivolatile organic compounds, strontium-90, gamma and alpha spectroscopy, uranium and thorium isotopes, target analyte list metals as well as polychlorinated biphenyls. The telephone log should also be referenced in all future correspondence.

Finally, the response to HRMB's comments regarding the *Draft* Non-traditional In-Situ Vitrification Demonstration Plan and Program Plan for the MDA-V Site referenced by EM/ER:99-074 and dated April 6, 1999 is sufficient and have been addressed appropriately in the VCM Plan.

LANL shall respond to the request for supplemental information within thirty (30) calendar days of the receipt of this letter. Should you have any questions please do not hesitate to call John Kieling of my staff at (505) 827-1558, extension 1012 or myself at 827-1561 extension 1039.

Sincerely,



John E. Kieling
LANL Project Leader
RCRA Permits Management Program
Hazardous and Radioactive Materials Bureau

JEK:jry

cc w/attachment:

J. Bearzi, NMED HRMB
J. Canepa, LANL EM/ER, MS-M992
J. Davis, NMED SWQB
M. Kirsch, LANL EM/ER, MS-M992
M. Leavitt, NMED GWQB
D. McInroy, LANL EM/ER, MS-M992
D. Neleigh, EPA, 6PD-N
J. Parker, NMED DOE-OB
J. Plum, DOE LAAO, MS-A316
J. Vozella, DOE LAAO, MS-A316
S. Yanicak, NMED DOE-OB, MS-J993
P. Young, NMED HRMB
File: LANL HSWA 1/1106/21

Attachment: Request for Supplemental Information Comments

General Comments:

1. Please include the available data from baseline sampling activities as well as data from other sampling activities associated with this voluntary corrective measure (VCM). In addition, please include the area background data set for this area (TA-21?) in this plan.
2. Please include a key with the appropriate figures (e.g., Figure 4-3, page 13).
3. Please include a map illustrating the sample locations associated with the vitrified clay pipe.
4. Please include a map illustrating the tentative location of samples to be acquired for cleanup verification of the hydrocarbon contamination (post-NTISV).
5. Instead of listing clean-up criteria for TPH, BTEX, etc. (Section 3.0, page 7), LANL should discuss the approach to performing a site/area-specific screening and/or risk assessment for the area due to the additional, possibly area-wide, contamination (gross beta) found at depth. LANL should also discuss when the site/area-specific screening and/or risk assessment will be performed. LANL is reminded that HRMB only accepts draft LANL-wide background for screening and risk assessment activities.
6. LANL is reminded that before No Further Action can be proposed at this site, the outfall area (former PRS 21-027(d)) to Los Alamos Canyon must be characterized. Chemicals of potential concern associated with 21-027(d) include but are not limited to americium-241, plutonium-239, tritium, cadmium, and uranium.

Specific Comments:

7. **§ 4.1 Rational and Objectives, page 8, Fourth and Fifth Bullets**
 - *“demonstrate the ability of NTISV to process COPCs to values below the stipulated cleanup levels;*
 - *confirm that any COPCs remaining are below cleanup levels; and”*
- See general comment 5.*

8. § 4.3 Table 4-1 Baseline Samples, Cold Test Pit Samples, VCP Trench Samples, and Borehole Samples, page 10

Under the column title Analytical Methods, the proposed cold test pit location samples included metals analyses. Please add metals to the Analytical Methods column.

9. § 4.3 NTISV Activities, page 14, Second Paragraph

“To evaluate the product quality of the cold demonstration, two nonhazardous, nonradioactive surrogates will be added to the cobble layer of the pit.”

LANL should replace the “two nonhazardous” with “two non-RCRA regulated”. Because cesium and cerium are not considered hazardous according to RCRA, does not preclude that these materials are not hazardous.

10. § 4.3.2.2.2 Predemonstration Sampling, page 23, First Paragraph

This section mentions the use of x-ray fluorescence (XRF) for whole rock analyses. Please clarify if this is an energy dispersive or wavelength dispersive method.

11. § 5.0 Waste Management, page 33, Table 5-1

* *“All waste associated with the off-gas treatment system has the potential to be low-level waste because components are radioactively contaminated. The components were received from Oak Ridge National Laboratory.”*

Please clarify if the components of the off-gas treatment system have been decontaminated and if the contamination is a residual of the decontamination procedure. If not, provide the rationale for not decontaminating the off-gas treatment system. In addition, please discuss the range of radioactive contaminants that may be associated with the off-gas treatment system.

EM/ER Telephone Log

Call To: John Young (NMED-HRMB)
827-1558, ext. 1036
Call From: Paula Bertino (EM/ER)
Date: June 10, 1999

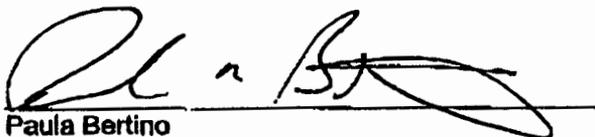
Discussion:

I phoned John Young, (NMED-HRMB) on Friday afternoon, June 4, 1999 to discuss analytical results received for pre-melt soil samples collected from the NTISV cold test excavation at TA-21. Specifically, gross beta results for five subsurface soil samples were elevated to approximately four times TA-21 background levels. We faxed and mailed Mr. Young the Modification to the Voluntary Corrective Measure (VCM) Plan for Consolidated PRS 21-027(d)-99 earlier on June 4, 1999, which discussed the post-melt confirmatory sampling and analysis approach. We proposed to analyze the confirmatory samples for TPH (diesel end) and SVOCs. However, based on the analytical results received and reviewed on June 4, 1999, we agreed to include gamma spectroscopy, strontium-90, and alpha spectroscopy for uranium and thorium isotopes to the suite of analytes for the confirmatory samples.

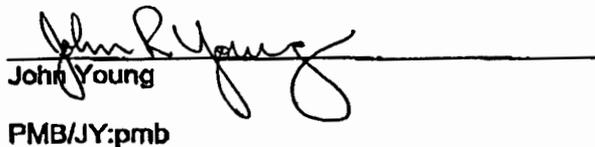
On Monday morning, June 7, 1999, I provided Mr. Young with the five specific pre-melt cold test excavation sample locations where elevated gross beta levels were observed: MD21-99-0009, -0010, -0013, -0014, and -0022. We also proposed analyzing sample numbers MD21-99-0009, -0013, and -0022 collected from the original cold test excavation for strontium-90 and alpha spectroscopy. These sample numbers represent three of the five locations in the cold test excavation where the elevated gross beta levels were observed.

EM/ER agreed to a subsequent request from Mr. Young on June 10, 1999, that we add PCBs and metals back into the suite of analytes for the confirmatory samples based on the apparent uncertainty of the potential contaminants of concern at the site.

Mr. Young indicated that this telephone log would be sufficient to document the addition of the radionuclide, PCBs, and metals analyses described above to the VCM Plan for consolidated PRS 21-027(d)-99.


Paula Bertino

I agree that the above telephone log accurately records the June 4, 7, and 10, 1999 telephone conversations between Paula Bertino and myself.


John Young
PMB/JY:pmb

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