NEPA REVIEW

LAN-05-001

Project/Activity Title: ***Proposed Remediation of MDA V within TA-21***	Accession No: 10961 LAN-05-001	Date: Oct. 4, 2004
Location: TA-21	Schedule: FY 05	Cost: $2.7 Million
DOE Program Office:	Non-DOE Sponsor:	
Project Contact: Ron Rager, RRES-ECR, 665-4065, MS M992		
Preparer/Contact: Marjorie Wright, LANL RRES-ECO Signature:	NEPA Reviewer: Susan D. Radzinski, LANL RRES-ECO Signature:	

DESCRIPTION OF PROPOSED ACTION:

The Proposed Action is the remediation of Material Disposal Area (MDA) V, a consolidated unit located at the west end of TA-21 on the south side of DP Road. MDA V, (now designated SWMU 21-018[a]-99), is about four acres in size and consists of: 1) three interconnected wastewater absorption beds (SWMU 21-018 [a]); 2) a former laundry facility for radioactively contaminated clothing (SWMU 21-018[b]); 3) a waste treatment laboratory septic system and outfall (SWMU 21-023[c]); and 4) a surface disposal area consisting of building debris (SWMU 21-013[b]) and another surface disposal area consisting of debris of unknown origin (AOC 21-013[g]). Consolidation of these sites was based on common processes and chemicals of potential concern at these sites as well as the proximity of the sites to each other.

The proposed remediation activities at MDA V focus on reducing the risk to human health and the environment by eliminating contaminant sources through removal of remaining infrastructure (such as drainlines) and areas where contaminants exceed screening action levels (SALs) or soil screening levels (SSLs). Remediation of MDA V would include removal of 1) a portion of the absorption beds where SALs or SSLs are exceeded; 2) pipes associated with the absorption beds; 3) contaminated slope debris; and soils in the septic outfall.

Remediation of SWMU 21-018 [a] would involve excavation and removal of distribution pipes and absorption bed materials (soil, sand, gravel, and cobbles). Absorption bed materials would be removed to SALs and SSLs

NEPA DETERMINATION BASED ON ABOVE DESCRIPTION:

☐ Covered by prior NEPA review: _____

☐ Requires EIS: ____

☒ LANL recommended CX: 10 CFR 1021, Subpart D, Appendix B

☐ CX exception - Prepare EA (refer to appropriate sections of 10 CFR 1021 for full definition (check all that apply)):

- ☐ extraordinary circumstances (410(b)(2):_____
- ☐ threaten violation of regulation (Subpart D, Appendix B (1)):
- ☐ uncontrolled release of hazardous substance (Subpart D, Appendix B (3))
- ☐ connected action (410(b)(3):_____
- ☐ siting or expansion of waste TSD facility (Subpart D, Appendix B (2))
- ☐ adverse effect sensitive resource (Subpart D, Appendix B (4))

☐ None of the above: Prepare EA. [If applicable:10 CFR 1021, Subpart D, Appendix C]

☐ Other: _____

Continuation Sheet:

or to a maximum depth of 12 feet (ft) (per EPA's risk assessment guidance, human health evaluation), whichever condition is met first.

Based on previous sampling, no contaminants are present above SALs and SSLs in absorption beds 2 and 3. However, these absorption bed materials would undergo further analysis to determine if removal may be required. Absorption bed 1 is known to contain contaminants at levels in excess of SALs and SSLs, particularly in the eastern portion. Absorption bed 1 was also the subject of a DOE-sponsored non-traditional in-site vitrification demonstration that resulted in the generation of a large glass block, approximately 30 ft wide by 20 ft long by 10 ft thick, covered with 10 ft of clean fill. Because the glass contains plutonium-239 in excess of the SAL, the glass block would be removed and the hole would be backfilled with clean soil.

The proposed remediation of SWMU 21-023(c) would include the removal of both infrastructure (septic system and pipes) and soil in excess of SALs and SSLs. The septic tank was removed in 1965. Remaining infrastructure at SWMU 21-023(c) would include the 4-inch (in) diameter vitrified clay pipe inlet and outlet line that transported sanitary waste from Building 21-33 via a sump to the septic tank and from the septic tank to the edge of "BV" Canyon ("BV" Canyon is a branch of Los Alamos Canyon downslope [south] of MDA V). Based on existing data, it would be necessary to excavate and remove contaminated soil from the outfall channel starting at the south edge of the mesa down into "BV" Canyon. Although several radionuclides are present in the outfall at levels exceeding SALs, the downslope extent of contamination is not well defined. Field-screening and subsequent chemical analyses would be used to determine the amount of soil that would need to be removed from the outfall.

Surface disposal areas SWMU 21-013(b) and AOC 21-013(g) are located on the canyon slope to the south of MDA V and consist of miscellaneous building debris. Although the source of some of the debris is unknown, it is known that debris from radioactively contaminated buildings was dumped at these sites. The proposed remediation of these sites would involve the removal and off-site disposal of debris. Remediation operations at these sites would be difficult due to the extreme slope gradient and the large size of some of the debris. Some large blocks of concrete, if found to be uncontaminated, may be left on the slope if technical or safety issues preclude their removal. Removal of debris would be accomplished by pushing it to the bottom or dragging it to the top of the slope with heavy equipment followed by on-site or off-site disposition, as appropriate based on waste characterization results. A detailed engineering plan would identify access points, staging areas, and required equipment.

The former laundry facility, SWMU 21-018(b), has been decommissioned and decontaminated, but is still included in this consolidated unit. Additional sampling would be conducted to support a finding of No Further Action by the New Mexico Environment Department.

Removal actions at MDA V would result in the generation of about 50 cubic yards of bulk mixed low-level waste including soil, and rock to be disposed of at Envirocare, in addition to about 1,500 to 2,500 cubic yards of bulk low-level waste including soil, rock, and debris, to be disposed of at Area G within TA-54. Clean fill would be brought from offsite to restore the excavated area. A Storm Water Pollution Prevention Plan would be required. A National Pollutant Discharge Elimination System General Permit Notice of Intent would be filed, if required. Best management practices (BMPs) for soil erosion control purposes would be implemented, as necessary, for any site remediation activities involving soil disturbance. BMPs would include run-on and run-off controls, such as straw bales, silt fencing, ditching, and similar storm water flow controls. Air pollution control technologies would be applied as necessary and appropriate. A Biological Assessment has been prepared by RRES-ECO and submitted to DOE; no adverse affect to individual threatened or endangered

species protected by the Endangered Species Act is anticipated, nor would any critical habitat be adversely affected. There are no cultural resource issues. It is estimated that remediation activities at MDA V would cost about $ 2.7 M and would take about 6 months to implement.

NCO CLASSIFICATION/DETERMINATION:

This proposed action is covered by the categorical exclusion for "Small scale, short-term cleanup actions under RCRA, Atomic Energy Act, or other authorities, less than approximately 5 million dollars in cost and 5 years duration, to reduce risk to human health or the environment from the release or threat of release of a hazardous substance" (10 CFR 1021, Appendix B 6.1).

If changes are made to the scope of action so that it is no longer bound by the action described in the attached checklist, or is expanded to encompass other actions, NEPA requirements for the action will need to be reassessed at that time and further analysis may be required.

Signature: Date: October 4, 2004

Elizabeth R. Withers, NEPA Compliance Officer