

**Response to the Notice of Disapproval for the
Investigation Work Plan for Chaquehui Canyon Aggregate Area,
Los Alamos National Laboratory EPA ID No: NM0890010515, HWB-LANL-09-072,
Dated January 28, 2010**

INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comment is included verbatim. Los Alamos National Laboratory's (the Laboratory's) response follows the NMED comment.

GENERAL COMMENTS

NMED Comment

1. *There are several sites (33-002(a), 33-002(b), 33-002(c), 33-006(a), 33-007(b), 33-010(c), C-33-001, and C-33-003) within the Chaquehui Canyon Aggregate Area where voluntary corrective actions (VCA) were conducted prior to 2006. The Permittees have proposed to utilize data obtained during these investigation/remediation activities as decision-level data for currently proposed investigation sampling strategies, even though the Permittees have not submitted reports on any of the VCA activities. NMED cannot consider data that have never been submitted. This applies to the Permittees' proposed sampling strategy for SWMUs 33-002(a-c), 33-006(a), 33-007(b), 33-010(c) and AOCs C-33-001 and C-33-003.*

The Permittees have two options: 1) submit a report that documents the results of the VCA activities at SWMUs 33-002(a-c), 33-006(a), 33-007(b), 33-010(c) and AOCs C-33-001 and C-33-003; or 2) revise the Work Plan to include more extensive sampling and full-suite analysis (metals, VOCs, SVOCs, PCBs, nitrate, perchlorate, tritium, isotopic uranium, isotopic plutonium, high explosives, cyanide) at all five sites.

If the Permittees choose to submit a summary report, the report must describe the locations, methods, and depths of subsurface investigation activities; soil, rock, and sediment sampling; field-screening methods and results; and sampling methods and results for all five sites. For this option, the Permittees must propose a date for submittal of this report in their response to this NOD. Following review and approval of the report, the Permittees must revise and resubmit the Work Plan. Once a due date is selected for submittal of the summary report and the revised Work Plan, a new approval date will be established.

*The Permittees must submit a response to this NOD no later than **February 22, 2010**. The response must include a proposed submittal date for the report documenting the investigation/remediation activities at SWMUs 33-002(a-c), 33-006(a), 33-007(b), 33-010(c) and AOCs C-33-001 and C-33-003, if applicable. All submittals (including maps) must be in the form of two paper copies and one electronic copy in accordance with Section XI.A of the Order.*

LANL Response

1. NMED's comment identifies eight sites where voluntary corrective actions (VCAs) or other investigation/cleanup activities have been performed but for which no reports have been submitted to NMED. Decision-level data associated with these investigation and remediation activities were presented in the Chaquehui Canyon Aggregate Area investigation work plan (LANL 2009, 107347). For three of these sites [Solid Waste Management Units (SWMUs) 33-002(a–c)], the Laboratory intends to use the data from the VCA for decision purposes (i.e., to determine nature and extent and conduct risk screening) and will prepare a VCA summary report, as described in NMED's comment (Option 1 above). Although decision-level data were presented in the work plan in descriptions of past activities for the other five sites [SWMUs 33-006(a), 33-007(b), 33-010(c), and Areas of Concern (AOCs) C-33-001 and C-33-003], the Laboratory does not intend to use the data for nature and extent determination or risk screening. The status of the sites identified in NMED's comment and the Laboratory's proposed actions for each site are described below.

SWMUs 33-002(a–c). These SWMUs consist of a septic system and two seepage pits associated with Material Disposal Area K. An accelerated corrective action (ACA) was implemented at these sites in 2005 but was not documented in a report. The ACA generated a large amount of decision-level data, which were presented in the work plan. The Laboratory intends to use the decision-level data collected during the ACA to define nature and extent at these sites and to perform risk screening assessments. The investigation activities for these sites proposed in the work plan are designed to provide data to augment the ACA data. Because the Laboratory intends to use the ACA data for decision-making, the ACA activities and results will be documented in a VCA summary report, as described in NMED's comment (Option 1 above).

SWMU 33-006(a). This SWMU consists of an inactive firing site. An interim action (IA) was performed at this site in 1996 to remove contaminated debris from the site and surrounding area. No confirmatory sampling was performed as part of the IA. Resource Conservation and Recovery Act facility investigation (RFI) sampling was performed in 1996 to resample several 1994 RFI sample locations where holding times for high explosives analysis had been exceeded. These data were not reported as decision-level data, and no other site data are decision-level data. New sampling locations are proposed in the work plan at the firing site to collect data needed to define nature and extent. Because no existing data will be used for decision-making, previous RFI and IA activities will not be documented in a VCA summary report.

SWMU 33-007(b). This SWMU consists of two former gun-firing sites. RFI sampling in 1995 generated decision-level data. An IA was implemented in 1996 to install stormwater controls, but no sampling was performed. A VCA was performed in 1999 and included soil excavation and treatment at one of the sites. VCA sampling at four locations within the firing site and two locations in a drainage from the site generated decision-level data. Because of site disturbances that have occurred since the RFI and VCA samples were collected, it is not known if these data are representative of current site conditions. Therefore, the RFI and VCA data will not be used for decision-making purposes. New sampling locations are proposed in the work plan at each firing site to collect data needed to define nature and extent. Because the RFI and VCA data will not be used, it is not necessary to document this sampling in a VCA summary report.

SWMU 33-010(c). This SWMU consists of a former surface disposal area. A VCA was implemented in 1999 to excavate and treat potentially contaminated soil. VCA sampling performed at four locations within the excavated area and three locations in a drainage from the site generated decision-level data. Because of site disturbances that have occurred since the VCA samples were collected, it is not known if these data are representative of current site conditions. Therefore, the VCA data will not be

used for decision-making purposes. For this reason, and because the SWMU will be investigated in conjunction with adjacent SWMU 33-010(g), the work plan proposes collecting samples from new locations. Because the VCA data will not be used, it is not necessary to document this sampling in a VCA summary report.

AOC C-33-001. This AOC consists of a former electrical transformer. RFI sampling was performed at the site in 1996 but was not documented in a report. RFI samples were collected at four locations, but only at one depth. In the work plan, the Laboratory proposed to resample these four locations at two depths, including the same depth originally sampled during the RFI. Two additional locations downgradient of the RFI locations are also proposed for sampling to define lateral extent. Therefore, the RFI data will be replaced by new data and will not be used for decision-making. Because the RFI data will not be used, it is not necessary to document this sampling in a VCA summary report.

AOC C-33-003. This AOC consists of two areas of potential soil contamination. A VCA was conducted in 1999 to remove and treat contaminated soil. Decision-level data presented in the work plan are from four VCA confirmation samples collected in each area and two samples collected in a drainage from one of the areas. The results from these samples were not sufficient to determine nature and extent. In the work plan, the Laboratory proposed to resample these 10 VCA locations at same and greater depths to define vertical extent and to sample additional locations to define lateral extent. Therefore, the VCA data will not be used for decision-making and will be replaced by new data. Because the VCA data will not be used, it is not necessary to document this sampling in a VCA summary report.

Summary. The work plan (LANL 2009, 107347) presented decision-level data associated with past investigation and cleanup activities that had not been reported to NMED. With the exception of the ACA conducted at SWMUs 33-002(a–c), the decision-level data from these activities will not be used to determine nature and extent or to perform risk screening assessments. Therefore, there is no need to document the activities generating these data in a VCA summary report as suggested by NMED. The investigation activities proposed in the work plan for SWMUs 33-006(a), 33-007(b), and 33-010(c) and AOCs C-33-001 and C-33-003 are not based on use of decision data. That is, decisions for these sites will be based entirely on the new data to be collected during the proposed investigation. Therefore, no revision to the work plan or a VCA summary report documenting this sampling are necessary for these sites.

A VCA summary report will be prepared, as described in NMED's comment, for the ACA activities conducted at SWMUs 33-002(a–c). This report will be submitted to NMED no later than July 30, 2010.

REFERENCE

LANL (Los Alamos National Laboratory), November 2009. "Investigation Work Plan for Chaquehui Canyon Aggregate Area," Los Alamos National Laboratory document LA-UR-09-7401, Los Alamos, New Mexico. (LANL 2009, 107347)