



IRM-RMMSO Official Correspondence Form

Name:	U1200616			
Title:	Notice of Disapproval Investigation Report for DP Site Aggregate Area Delayed Sites and DP East Building Footprints at TA-21 LANL EPA ID NM089001515 HWB-LANL-097			
Date Received:	4/2/2012			
Addressee Name:	M. Graham, ADEP			
Originator:	J. Kieling, NMED			
Action Item Description:	Permittees must address all comments & submit a revised IR or replacement pag...			
Action Due Date:	4/6/2012			
Responsible for Action:	Search <input type="text" value="Graham, Michael J"/>			
Responsible Office:	PADCAP			
Distribution:	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> Michael J. Graham Elizabeth D. Sellers Richard A. Marquez David J. McInroy Phoebe K. Suina William Z. Alexander Tina M. Sandoval </td> <td style="width: 50%; border: none;"> Charles F. McMillan Scotty Jones C. A. Beard Michael T. Brandt Anthony R. Grieggs Paul Henry Deborah K. Woitte </td> </tr> </table>		Michael J. Graham Elizabeth D. Sellers Richard A. Marquez David J. McInroy Phoebe K. Suina William Z. Alexander Tina M. Sandoval	Charles F. McMillan Scotty Jones C. A. Beard Michael T. Brandt Anthony R. Grieggs Paul Henry Deborah K. Woitte
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U1200616



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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

EP2012-5074

March 29, 2012

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Michael Graham
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RE: NOTICE OF DISAPPROVAL
INVESTIGATION REPORT FOR DP SITE AGGREGATE AREA DELAYED
SITES AND DP EAST BUILDING FOOTPRINTS AT TA-21
LOS ALAMOS NATIONAL LABORATORY (LANL)
EPA ID #NM0890010515
HWB-LANL-11-097

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Investigation Report for DP Site Aggregate Area Delayed Sites [Consolidated Unit 21-004(b)-99 and Solid Waste Management Unit 21-011(b)] and DP East Building Footprints at Technical Area 21, Revision 1 (IR)*, dated March 2012 and referenced by LA-UR-12-1060/EP2012-0061. NMED has reviewed the IR and hereby issues this Notice of Disapproval.

The Permittees' reply to the comments provided in the January 18, 2012 Notice of Disapproval (NOD) was unresponsive. By not providing the information requested by NMED in the NOD, the Permittees have failed to fulfill the requirements of both the approved work plan and the March 1, 2005 Consent Order (Order). The Permittees must address the following comments before NMED can complete its review.

The Permittees did not adequately address the following comments included in NMED's NOD. Specifically:

1) **NMED's Comment #2, Borehole Logs**

Original NMED Comment #2: Section 8.4, Subsurface Sampling, of the *Investigation Work Plan for Delta Prime Site Aggregate Area Delayed Sites, Revision 1* (IWP) states, "[s]ubsurface samples will be collected using a drill rig with a hollow-stem auger advanced with a split spoon sampler or by hand augering. Field documentation will include detailed borehole logs to document the matrix material in detail; fractures and matrix samples will be assigned unique identifiers."

Section B-5.2, Borehole Logging, of the IR states, "[t]he required sampling depths at all locations were reached by hand augers or a power auger attachment. A drill rig with a hollow-stem auger was not used to collect subsurface samples. Therefore, there were no boreholes to log."

The last sentence of the quoted statements above is not accurate. Whether augering with a hollow-stem auger or a hand auger, a borehole is created. The approved IWP provided by the Permittees states that detailed borehole logs would be provided for all sampling locations for either hollow-stem augering or hand augering. The borehole logs were not provided. The IR is incomplete without detailed boring logs. In addition, the Permittees neglected identifying fracture and matrix samples, as required by the approved work plan. The Permittees must provide detailed boring logs for all boreholes advanced more than five feet below ground surface in the revised IR.

Permittees' March 21, 2012 Response: In all previous investigation reports, detailed boring logs have been provided only when boreholes were advanced using a drill rig. Borehole logs have not been prepared for hand- or power-augered holes because the depths of these holes are relatively shallow and the degree of disturbance caused by hand or power augering makes accurate determination of stratigraphic changes impossible. For hand- or power-augered sampling locations, details of each sample collected are provided on the sample collection logs, including identification of the soil matrix and whether any fractures were encountered. A reference to the sample collection logs for detailed sample information has been added to the text in section B-5.2. The statement "Therefore, there were no boreholes to log" has been deleted from the text in Appendix B.

NMED Comment: The Permittees did not supply boring logs as requested in Comment #2. Although the approved work plan specified that borehole logs would be provided for all boreholes, NMED is asking only for logs for borings advanced to depths greater than 5-ft bgs. The approved work plan for this site specifically stated that "detailed borelogs" would be provided for all boreholes, not just those drilled with a drill rig. The assertion that "[i]n all previous investigation reports, detailed boring logs have been provided only when boreholes were advanced using a drill rig" is not relevant since the Permittees proposed to

log all borings in the approved work plan. The Permittees must fulfill the requirements of the approved work plan or clearly state that the approved work plan was not followed.

2) **NMED's Comment #7, Section B-5.3, Subsurface Tuff Sampling Methods, page B-2**

Original Permittees' Statements Quoted in NOD: "Subsurface samples were collected in accordance with approved subcontractor procedures technically equivalent to SOP-06.10, Hand Auger and Thin-Wall Tube Sampler, or SOP-06.26, Core Barrel Sampling for Subsurface Earth Materials."

"Samples for VOC analysis were immediately transferred from the sample collection device to the sample container to minimize the loss of subsurface VOCs during the sample collection process. Containers for VOC samples were filled as completely as possible, leaving no or minimal headspace, and sealed with a Teflon-lined cap."

Original NMED Comment #7: Core barrel sampling was not utilized on this project; therefore, specifying that samples were collected in accordance with SOP-06.26 in the quoted statements above is not accurate. The Permittees must remove the reference to SOP-06.26 or provide an explanation for its inclusion.

References to SOPs are inadequate for description of sampling activities in the IR. Section IX.A of the Order specifically requires descriptions of the methods and procedures proposed for use or used during site investigations and remediation activities. In addition, Section XI.C.9.a of the Order states the requirements for description of soil, rock and sediment sampling in an Investigation Report. The Permittees must describe in detail the methods used for collection of samples for analysis. Detailed description must include specifications of the "sample collection device" referenced in the quotation above, specifications of the hand auger and/or thin-walled tube sampler utilized, specifications of the power auger attachment, and the specific methodology (step by step) followed when using these devices. The Permittees must also provide a detailed description of how sampling was conducted in the 20-ft deep isotope separation pit below building 21-155, as well as how 21-22 ft deep samples were collected using a power auger attachment and/or a hand auger.

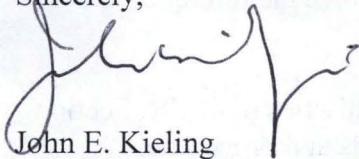
Permittees' March 21, 2012 Response: The reference to Standard Operating Procedure (SOP) 06.26 has been removed from section B-5.3. The use of the power auger allowed the hand auger to reach the specified depths of approximately 20 to 30 ft below ground surface (bgs). The power auger was used to drill down to within 0.5 ft of the depth at which the sample was collected. Subsequently, a hand auger was used to collect the sample material at the designated sampling depth in a manner equivalent to SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. This information has been added to section B-5.3. In addition, for consistency, "sample collection device" has been changed to "auger bucket" throughout Appendix B.

NMED Comment: The Permittees did not provide the information requested in this comment. No specifications for the hand auger and/or thin-walled tube sampler were provided. Specifications for the power auger/power auger attachment were not provided, in addition to the step-by-step methodology followed when using these devices. A detailed description of how sampling at 20 to 30 ft depths with a power auger was performed was also not provided. The Permittees must provide these details in the revised IR.

The Permittees must address all comments herein and submit a revised IR, or replacement pages, by **April 6, 2012**. Any additional work proposed for the next phase of investigation (Phase II) must be listed in the Recommendations section of the IR. 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. In addition, the Permittees must submit a redline-strikeout version that includes all changes and edits to the Investigation Work Plan (electronic copy) with the response to this NOD.

Please contact Ben Wear at (505) 476-6041 should you have any questions.

Sincerely,



John E. Kieling
Acting Chief
Hazardous Waste Bureau

cc:

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File: LANL '12, TA-21, DP Site Aggregate Area

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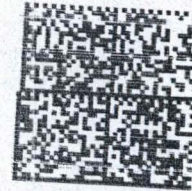


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