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Date: December 14, 2007
Refer To: EP2007-0761

James P. Bearzi, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Subject: Submittal of the Response to the Notice of Disapproval for the Investigation Work Plan for the North Ancho Canyon Aggregate Area and Revision 1

Dear Mr. Bearzi:

Enclosed please find two hard copies with electronic files of the following:

- Response to the Notice of Disapproval for the Investigation Work Plan for North Ancho Canyon Aggregate Area
- A complete revision of this plan (Revision 1)
- An electronic copy of the redline-strikeout version of the plan that includes all changes and edits to the plan

This response is based on discussions with your staff during a meeting held on November 5, 2007, and a site visit conducted on November 15, 2007.

If you have any questions, please contact John McCann at (505) 665-1091 (jmccann@lanl.gov) or Rich Nevarez at (505) 845-5804 (rnevarez@doeal.gov).

Sincerely,

Susan G. Stiger, Associate Director
Environmental Programs
Los Alamos National Laboratory

Sincerely,

David R. Gregory, Project Director
Environmental Operations
Los Alamos Site Office

SS/DG/JM/KB:sm

Enclosures: 1) Two hard copies with electronic files – Response to the Notice of Disapproval for the Investigation Work Plan for North Ancho Canyon Aggregate Area (EP2007-0761)
2) Two hard copies with electronic files – Investigation Work Plan for North Ancho Canyon Aggregate Area, Revision 1 (EP2007-0762)
3) Cross-walk table

Cy: (w/enc.)
Kim T. Birdsall, Northwind
Rich Nevarez, DOE-LASO, MS A316
John McCann, EP-CAP, MS M992
RPF, MS M707 (with two CDs)
Public Reading Room, MS M992

Cy: (Letter and CD only)
Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-OB, White Rock, NM
Peggy Reneau, EP-ERSS, MS M992
EP-CAP File, MS M992

Cy: (w/o enc.)
Tom Skibitski, NMED-OB, Santa Fe, NM
Bonita Eichorst, DOE-LASO (date-stamped letter emailed)
Susan G. Stiger, ADEP, MS M991
Carolyn A. Mangeng, ADEP, MS M991
Alison M. Dorries, EP-ERSS, MS M992
Dave McInroy, EP-CAP, MS M992
IRM-RMMSO, MS A150

Cross-Reference between NMED Notice of Disapproval Comments (October 30, 2007) on "Investigation Work Plan for North Ancho Canyon Aggregate Area" and Revision 1

NMED Comment No.	Section(s), Table(s), or Figure(s) in Original Work Plan	Page(s) in Original Work Plan	Section(s), Table(s), or Figure(s) in Revised Investigation Work Plan	Page(s) in Revised Work Plan	Nature of Revision to Investigation Work Plan
General Comments					
1	Table of Contents; Figures 4.7-1, 4.13-1, and 4.15-1	118, 120, and 122	Table of Contents; Figures 4.7-1, 4.13-1, and 4.15-1	vii-xii, 127, 133, and 135	The table of contents has been revised and extensively checked to ensure all figures are included. The text has been reviewed to ensure that figure call outs are consistent and correct.
2	Sections 4.7.2, 4.8.2, 4.13.2, 4.15.2, 4.16.2, 4.18.2, and 4.20.2		Table 4.0-1; Sections 4.7.2, 4.8.2, 4.13.2, 4.15.2, 4.16.2, 4.18.2, and 4.20	175–178, 39, 40, 43, 44–45, 46, 47, 49	A footnote was added to Table 4.0-1 to clarify that 30% of field-screened samples will be submitted for off-site analysis. In addition, the text has been clarified to state that a random selection of the field-screened samples will be submitted for off-site analysis.
3	Sections 4.7, 4.8, 4.13, 4.14, 4.15, 4.16, 4.18, and 4.19		Figure 3.1-1	124	Figure 3.1-1 presents the proposed South Canyon's sampling locations and depicts their proximity to the SWMUs and AOCs in the North Ancho Canyon Aggregate Area. The figure includes reaches AN-2, AN-3, and AN-4.
4	All sites undergoing investigation		Tables 4.0-1, 4.1-1, and 4.3-1	175–178, 179, and 184	Dioxins/furans and tritium have been added to the list of parameters in Tables 4.0-1, 4.1-1, and 4.3-1 Additionally, a footnote has been added to Table 4.0-1 to indicate that the most contaminated field-screened sample will be submitted for off-site dioxin/furan analysis. Organic field-screening samples will be used to select the most contaminated sample when available. Otherwise, the most contaminated radionuclide or metal screened sample will be used to select the sample to be submitted for dioxin/furan analysis. One sample at each depth will be submitted for dioxin/furan analysis. Tritium will be analyzed for in all samples submitted for off-site analysis.
Specific Comments					
1	Section 2.2.1.4	12	Section 2.2.1.4	13	The text has been revised to state that the data from two downstream samples are screening-level data and are therefore, not included in Figures 2.2-2 to 2.2-4.

NMED Comment No.	Section(s), Table(s), or Figure(s) in Original Work Plan	Page(s) in Original Work Plan	Section(s), Table(s), or Figure(s) in Revised Investigation Work Plan	Page(s) in Revised Work Plan	Nature of Revision to Investigation Work Plan
2	Section 4.2	34	Executive Summary; Sections 1.1.2, 4.0, and 4.2; Tables 1.0-1 and 4.0-1	vi, 3, 35, 36, 141–146, and 175–178	The Executive Summary and sections 1.1.1, 4.0, and 4.2 have been revised. Text in the Executive Summary, section 1.1.1, and section 4.0 has been added to indicate that "Although determining the nature and extent of contamination at these sites before the close of firing activities can be conducted at this time, the continued explosives testing at these sites makes any determination of nature and extent obsolete as soon as the next activity occurs. Therefore, it is proposed that full characterization of these sites be delayed until firing operations cease. At that time, the collection of a definitive data set is possible and will allow for the selection of the most appropriate remediation action for these sites. This work plan proposes an interim sampling strategy to identify the potential contaminants of concern, to determine if contaminants are migrating, and to confirm that active firing activities are dispersing the same contaminants as those dispersed by historical firing activities. In addition, SWMU-specific information has been included in section 4.2.1 to indicate that samples will be taken in the interim at SWMU 39-004(d) to confirm that active firing activities are dispersing the same contaminants as those dispersed by historical firing activities and to investigate the migration of contaminants downgradient from of this SWMU and to confirm that active firing activities are dispersing the same contaminants as those dispersed by historical firing activities.
3	Section 4.3	34	Executive Summary; Sections 1.1.1, 4.0, and 4.3	v, 2, 35, and 37,	The text has been revised to indicate that SAAs are regulated under 40 CFR 262 and 20.4.1 NMAC. As such, it is appropriate for NFA because of the prescribed regulations applicable to SAAs, the stringent adherence to those regulations by the Laboratory, and the administrative record for these sites during their periods of operation.
4	Section 4.8	35	Sections 4.8 and 4.16	39 and 45	The text was revised to indicate landfill material will be excavated to 16 ft or to auger refusal in native tuff. Similar revisions have been made for SWMU 39-001(a).

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5	Sections 4.8.1 and 4.8.2	36	Sections 4.8.1, 4.8.2, and 4.16.2; Figures 4.8-1 and 4.16-1	39, 40, 45,129, and 136	The text was revised to indicate that lateral extent of contamination is not fully defined. Additional samples at 25-ft intervals along the sidewalls were added to the discussion, and samples will be targeted to the 5- to7- and 10- to15-ft intervals, as well as areas of visible staining or elevated detection by field screening. Similar revisions have been made for SWMU 39-001(a).
6	Section 4.8.2	36	Section 4.8.2 and 4.16.2; Figures 4.8-1 and 4.16-1	40, 45, 128, and 136	The text was revised to indicate that one confirmation sample will be collected for every 400 ft^2. Similar revisions have been made for SWMU 39-001(a).
7	Section 4.9	36	Executive Summary; Sections 1.1.2, 4.0, and 4.9.1; Figure 4.9-1	vi, 3, 35, 40, and 129	The Executive Summary and sections 1.1.2, 2.2.2.4, and 4.0 have been revised. A limited sampling campaign is proposed for SWMU 39-008, a nondeferred site listed on Table IV-1 of the Consent Order. The historical contaminants present at this site are the same or similar to the contaminants associated with the active firing site activities. Although determining the nature and extent of contamination at this site prior to the close of firing activities is possible, the continued explosives testing at this site makes any determination of nature and extent obsolete as soon as the next activity occurs. Therefore, it is proposed that full characterization of this nondeferred active firing site be delayed until firing operations cease. At that time, the collection of a definitive data set is possible and will allow for the selection of the most appropriate remediation action for this site. In addition, SWMU-specific information has been included in section 4.9.1 to indicate that samples will be collected in the interim to determine the potential for contaminants migrating downgradient from of this SWMU and to confirm that active firing activities are dispersing the same contaminants as those dispersed by historical firing activities and to determine the potential for contaminants migrating downgradient from this SWMU.

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8	Section 4.11	37	Executive Summary, Sections 1.1.2, 4.0, 4.11.1, and Figure 4.11-1	v–vi, 3, 35, 42, and 131	The Executive Summary, sections 1.1.2, and 4.0 have been revised. Text has been added to indicate that "Although determining the nature and extent of contamination at this site prior to the close of firing activities is possible, the continued explosives testing at this firing site makes any determination of nature and extent obsolete as soon as the next activity occurs. Therefore, it is proposed that full characterization of this nondeferred, active OD-RCRA regulated firing site be delayed until firing operations cease. At that time, the collection of a definitive data set is possible and will allow for the selection of the most appropriate remediation action for this site. In the interim, samples will be taken at SWMU 39-004(c) to confirm that active firing activities are dispersing the same contaminants as those dispersed by historical firing activities and to investigate the migration of contaminants downgradient from this SWMU." In addition, SWMU-specific information has been included in section 4.11.1 to indicate that samples will be collected in the interim to investigate the migration of contaminants downgradient and to confirm that active firing activities are dispersing the same contaminants as those dispersed by historical firing activities and to determine the potential for contaminants migrating downgradient from this SWMU.
9	Section 4.12	37	Sections 4.12.1; Figures 4.5-1, 4.10-1, and 4.12-1; Tables 1.0-1 and 4.0-1	42, 126, 130, 132, 141–146, 175–178,	The text has been revised to address proposed investigation activities to address contamination related to storage activities at AOC 39-002(b). Similar investigation activities have been added for AOCs 39-002(c) and 39-002(f).
10	Section 4.14.2	38	Section 4.14.2; Figure 4-14-1; Tables 1.0-1 and 4.0-1	43–44, 134, 141–146, and 175–178	The text in section 4.14.2 has been revised to include eight samples under the asphalt pad and areas of visible staining and cracks, if present, will be targeted for sampling. Similar text revisions were made for SWMU 39-001(a).

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11	Section 4.17	40	Executive Summary; Sections 1.1.1, 4.0, 4.3, and 4.17	v, 2, 35, 37, 46,	The text has been revised to indicate that this AOC is an SAA and that SAAs are regulated under 40 CFR 262 and 20.4.1 NMAC. As such, it is appropriate for NFA because of the prescribed regulations applicable to SAAs, the stringent adherence to those regulations by the Laboratory, and the administrative record for these sites during their periods of operation.
12	Section 4.18	40	Sections 4.18.1; Figure 4.18-1; Table 4.0-1	47, 137, 175–178	The text has been revised to include proposed investigation activities in Areas 2 and 3 at SWMU 39-002(a).
13	Section 4.19.2	41	Sections 1.1.2 and 4.19.1; Figure 4.19-2; Table 4.0-1	3, 48, 139, and 175–178	The text has been revised to include proposed investigation activities for the active components of SWMU 39-006(a).
14	Section 4.19.2	41–42	Section 4.19.2	48	The text was revised to indicate the circumstances that would change the proposed sampling locations. These include cracks in the line, visible staining, odors, and elevated detections as determined by field screening.
15	Section 4.19.2	42	Table 4.0-1	175–178	The information in Table 4.0-1 was revised to correspond with the text in Section 4.19.2. Samples will be collected from the base of the excavation from two sample depth intervals (0–0.5 and 0.5–1.0 ft) and from the sidewalls of the excavation from 2 depth intervals (5–7 and 10–15 ft).