



TA-16



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Date: October 13, 2006
Refer to: EP2006-0909

Mr. James Bearzi
NMED-Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303



**SUBJECT: REVISION TO SAMPLING NOTIFICATION, DATED JUNE 30, 2006
(EP2006-0629)**

Dear Mr. Bearzi:

Attached is a revised table detailing the number and types of samples and their associated analytical suites to be collected by the Los Alamos National Laboratory (LANL) Environmental Program – Corrective Actions Project (EP-CAP) in support of the 30s and 90s Line Ponds Aggregate Area investigation at Technical Area (TA) 16. The revised table helps clarify the intended sampling plan and provides a more direct correlation to Table 4.2-1 of the 30s and 90s Line Ponds investigation work plan. The table also accommodates the additional sampling requirements for the intermediate borings, as requested in the 30s and 90s Line Ponds notice of disapproval.

Sampling began in September 2006 and should be completed no later than December 2006. All fieldwork is being conducted in accordance with the following documents:

- "Investigation Work Plan of SWMUs 16-007(a)-99 (30s Line) and 16-008(a)-99 (90s Line) at TA-16" (LA-UR 05-1694) and
- Response to "Notice of Disapproval for Investigation Work Plan of SWMUs 16-007(a)-99 (30s Line) and 16-008(a)-99 (90s Line) at TA-16, Los Alamos National Laboratory, EPA-ID #NM0890010515, HWB-LANL-05-004 Revision 1.

If you have any questions, please contact John McCann at (505) 665-1091 or email jmccann@lanl.gov.

Sincerely,

Andrew Phelps, Associate Director
Environmental Programs
Los Alamos National Laboratory

Sincerely,

David Gregory, Federal Project Director
Department of Energy
Los Alamos Site Office



Mr. James Bearzi
EP2006-0909

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October 13, 2006

DG/AP/JM/ew

Enclosure: Table: Summary of Borehole Drilling, Sampling, Field Screening, and Analyses Proposed for Consolidated Units 16-007(a)-99 and 16-008(a)-99, 30s Line and 90s Line Ponds

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**Summary of Borehole Drilling, Sampling, Field Screening, and Analyses Proposed for
Consolidated Units 16-007(a)-99 and 16-008(a)-99, 30s Line and 90s Line Ponds**

Consolidated Units	Area Addressed	Number of Boreholes/Sample Locations	Borehole Total Depth (ft)	Geologic Units encountered	Minimum Number of Samples Estimated for On-site Field Screening	Minimum Number of Samples Estimated for Fixed Laboratory Analysis	Fixed Laboratory Analysis												
							VOCs (SW-846 8260B)	SVOCs (SW-846 8270C)	HE Compounds (per Table III-1 of Consent Order)	TAL Metals (incl. Mercury) (SW-846 6010B, SW-846 7471A)	Chromium VI (SW-846 7196A)	Cyanide (SW-846 9012A or 9010B)	Uranium (SW-846 6020)	TPH DRO (SW-846 8015M)	Nitrate (EPA Method 300)	Perchlorate (SW-846 8321A)	Anions (EPA Method 300)	Alkalinity (EPA Method 310.1)	Total Dissolved Solids (TDS)
16-007(a)-99	30s Line Ponds – HE-contaminated soil associated with historic BH 16-23739	3	At least 5 ft below the fill/tuff interface (~15 ft)	Fill Qbt 4	18	9 (3 per BH)	X ^a	X	X	X	X	X	X	-	X	X	-	-	-
	30s Line Ponds – Intermediate Depth Borings	3	~150 ft	Fill Qbt 4 Qbt 3	33	15 (5 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
	30s Line Former Sumps	3	At least 5 ft below the fill/tuff interface (~15 ft)	Fill Qbt 4	18	9 (3 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
	30s Line Former Buildings	6		36	18 (3 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-	
	Perched Groundwater ^c (if encountered during drilling)	TBD ^d	~150 ft	TBD	n/a	3 (1 per deep BH)	X	X	X	X	-	X	X	-	X	X	X	X	X
16-008(a)-99	90s Line Pond – BHs per the 1993 OU 1082 RFI WP	4	~20 ft	Fill Qbt 4	24	12 (3 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
	90s Line Pond – Perimeter of 90s Line Pond	2	At least 5 ft below the fill/tuff interface (~15 ft)	Fill Qbt 4	12	6 (3 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
	90s Line Pond – Intermediate Depth Borings	3	~150 ft	Fill Qbt 4 Qbt 3	33	15 (5 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
	90s Line Pond – Radial Traverses	16	2 ft into tuff or auger refusal (~5-10 ft)	Fill Qbt 4	48	32 (2 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
	90s Line excavated areas (including Former Sumps and Drainlines)	10	At least 5 ft below the fill/tuff interface (~15 ft)	Fill Qbt 4	60	20 (2 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
		9			54	18 (2 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
	90s Line Former Drum Storage Area	1			6	3	X	X	X	X	-	X	X	X	X	X	X	-	-
90s Line Former Building Footprints	10	60			30 (3 per BH)	X	X	X	X	-	X	X	X	-	X	X	-	-	-

**Summary of Borehole Drilling, Sampling, Field Screening, and Analyses Proposed for
Consolidated SWMUs 16-007(a)-99 and 16-008(a)-99, 30s Line and 90s Line Ponds**

Consolidated SWMU	Area Addressed	Number of Boreholes/Sample Locations	Borehole Total Depth (ft)	Geologic Units encountered	Minimum Number of Samples Estimated for On-site Field Screening	Minimum Number of Samples Estimated for Fixed Laboratory Analysis	Fixed Laboratory Analysis												
							VOCs (SW-846 8260B)	SVOCs (SW-846 8270C)	HE Compounds (per Table III-1 of Consent Order)	TAL Metals (incl. Mercury) (SW-846 6010B, SW-846 7471A)	Chromium VI (SW-846 7196A)	Cyanide (SW-846 9012A or 9010B)	Uranium (SW-846 6020)	TPH DRO (SW-846 8015M)	Nitrate (EPA Method 300)	Perchlorate (SW-846 8321A)	Anions (EPA Method 300)	Alkalinity (EPA Method 310.1)	Total Dissolved Solids (TDS)
16-008(a)-99	90s Line Geomorphic drainage channels - Center of drainage channels based on a geomorphologic field assessment.	4	2 ft into tuff or auger refusal (~5-10 ft)	Fill Qbt 4	12	8 (2 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
	90s Line Geomorphic drainage channels - Overbank Sediments	8			24	16 (2 per BH)	X	X	X	X	-	X	X	-	X	X	-	-	-
	Cañon de Valle discharge - Center of 90s Line Drainage	4			12	8 (2 per BH)	X	X	X	X	X	X	X	-	X	X	-	-	-
	Cañon de Valle discharge - Center of Former Buildings 92 and 93 Drainage Channels	4			12	8 (2 per BH)	X	X	X	X	X	X	X	-	X	X	-	-	-
	Cañon de Valle discharge - Overbank Sediments	4			12	8 (2 per BH)	X	X	X	X	X	X	X	-	X	X	-	-	-
	**Perched Groundwater (if encountered during drilling)	TBD	~150 ft	TBD	n/a	3 (1 per deep BH)	X	X	X	X	-	X	X	-	X	X	X	X	X

^a X = Submitted for analytical suite

^b - = Not submitted for analytical suite

^c = Perched groundwater is not anticipated to be encountered during drilling; however, groundwater samples will be collected and submitted offsite for the following analyses if encountered.

^d TBD = To be determined