

Info

Subject: Info

Date: Thu, 01 Feb 2001 17:01:10 -0700

From: Terry Rust <trust@lanl.gov>

To: vickie_maranville@nmenv.state.nm.us, Darlene_Goering@nmenv.state.nm.us

Vicki,

Attached should be the clarification on the 73-2 Report. Maybe we can talk about some of these on Monday while Steve Calhoun is with me.

good weekend!!

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HSWA LANL (1/07/73 73-002)



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73-2 Responses

Comment 1) Page 55, 2nd paragraph, “Acetone ___ detected in 1-17 samples ___”
Question = All method blanks?
Concentrations?
Which samples?

Response 1) The attached Table 1 identifies method blank contamination and the affected samples per request number (also see Appendix C, Table C-5.2-1). All samples were qualified as not detected because the result for that analyte in the samples was less than 5 times (10 times for Acetone and Methylene chloride) the amount of that analyte in the daily method blank. The numbers in bold and italicized are the concentrations in the method blank for that set of samples.

Comment 2) Page 70, 1st paragraph, “Sample data supports ___”
Question = Samples collected inside pit?
What data?

Response 2) As part of the RFI sampling conducted in 1996, two soil samples were collected from the bottom of each of the six unlined septic pits at the soil/tuff interface. Following sample collection, the pits were backfilled. As a continuation of the RFI in 1999, two additional samples were collected from the tuff beneath each septic pit at depths of approximately two feet or less below the original samples. For five of the septic pits, the COPCs detected in the 1996 samples from within the pit were not detected or were detected at less than the background value (BV) in the deeper 1999 tuff samples. In only one instance, PRS C-73-005(d), was a chemical (lead) that had been retained as a COPC from the 1996 samples detected in the deeper 1999 tuff samples above the BV. However, the lead concentrations in the deeper samples were significantly lower than in the overlying samples. Based on these data, it was determined that any contaminants that may have been present in the septic pits did not significantly infiltrate the underlying tuff. Furthermore, based on the investigatory approach discussed in Section 2.3.3.1, horizontal samples were not collected because it was not demonstrated that the underlying tuff was contaminated with the same or increasing concentrations.

Comment 3) Page 70-71, last paragraph, Canyons stuff – too detailed – appears to lump geomorph units – point out that Canyon bottoms and sampled = no release.

Response 3) The concentrations of lead and zinc, the predominant contaminants associated with Consolidated PRS 73-005-99, were examined in DP Canyon immediately south of the PRS. Sample results reported in the DP Canyon Reach Report did not indicate any spike in lead or zinc concentrations in the area of the section of the canyon that receives run off from the PRS. This indicates that the TA-73 sites above the canyon are minor contributors to any sediment concentrations and that extent of contamination has been defined as related to DP Canyon.

Comment 4) Page 73, legend vague.

Response 4) The geomorphic unit descriptions for the DP Canyon reaches depicted in the RFI report on Figures 2.3-25 (page 73), 2.3-26 (page 74), and 2.3-27 (page 75) are shown on the attached Table 3.

These geomorphic unit descriptions were omitted from the RFI report because they were not relevant to the issue being discussed; that there were no apparent increases in lead or zinc concentrations in DP Canyon sediments resulting from PRS 73-005-99 runoff. It would have been sufficient to depict only the combined aerial extent of post-1942 sediment and the sample locations and data.

Additional issues unrelated to the RSI:

- 1) Table 2.3-1 in final report – Location ID 73-10138 under PRS ID C-73-005(d) should be deleted.
- 2) Table 2.3-1 in final report – There should be an additional location with two additional samples tabulated for PRS C-73-005(f) (Location ID 73-02192 with Samples 0173-96-0281 and RE73-99-0031).

Table 1
Samples Affected by Method Blank Contamination

Request #	Sample IDs of Samples Affected						
	5218R	5224R	5230R	5232R	5245R	5265R	5303R
Acetone	6.4 ug/kg^a RE73-99-0030 RE73-99-0035	6.4 ug/kg RE73-99-0038 RE73-99-0039 RE73-99-0045	15.4 ug/kg RE73-99-0055	15.4 ug/kg RE73-99-0058	9.7 ug/kg RE73-99-0078	4.7 ug/kg RE73-99-0082	4.6 ug/kg RE73-99-0117
Methylene chloride	2.2 ug/kg RE73-99-0030 RE73-99-0031 RE73-99-0032 RE73-99-0033 RE73-99-0034 RE73-99-0035 RE73-99-0036	2.2 ug/kg RE73-99-0037 RE73-99-0038 RE73-99-0039 RE73-99-0040 RE73-99-0041 RE73-99-0042 RE73-99-0044 RE73-99-0045 RE73-99-0046 RE73-99-0047	3.3 ug/kg RE73-99-0048 RE73-99-0050 RE73-99-0052 RE73-99-0054 RE73-99-0055 RE73-99-0057	3.3 ug/kg RE73-99-0058 RE73-99-0059 RE73-99-0067	2.2 ug/kg RE73-99-0073 RE73-99-0074 RE73-99-0075 RE73-99-0076 RE73-99-0077 RE73-99-0078 RE73-99-0079	1.7 ug/kg RE73-99-0080 RE73-99-0081 RE73-99-0082 RE73-99-0083 RE73-99-0086	1.5 ug/kg RE73-99-0117
Toluene	1.2 ug/kg RE73-99-0030 RE73-99-0031 RE73-99-0032 RE73-99-0033 RE73-99-0034 RE73-99-0035 RE73-99-0036	1.2 ug/kg RE73-99-0037 RE73-99-0038 RE73-99-0039 RE73-99-0040 RE73-99-0041 RE73-99-0042 RE73-99-0044 RE73-99-0045 RE73-99-0046 RE73-99-0047	0.4 ug/kg RE73-99-0050 RE73-99-0052 RE73-99-0054 RE73-99-0055 RE73-99-0057	0.4 ug/kg RE73-99-0058 RE73-99-0059 RE73-99-0067	0.3 ug/kg RE73-99-0073 RE73-99-0074 RE73-99-0075 RE73-99-0076 RE73-99-0077 RE73-99-0078 RE73-99-0079		
1,2-Dichlorobenzene							0.3 ug/kg RE73-99-0117
Xylene (Total)	0.5 ug/kg RE73-99-0030 RE73-00-0031						
Chloroform			0.4 ug/kg RE73-99-0048	0.4 ug/kg RE73-99-0058			

^a Bold and italicized numbers are the concentrations in the method blank for that set of samples.

Table 2
PRS C-73-005(a-f) Sample Intervals

PRS ID	Location ID	Sample ID	Sample Interval Per RFI Report (ft)	Revised Sample Interval ^a (ft)	Interval Between Samples (ft)
C-73-005(a)	73-02204	0173-96-0259	2.6-3.7 ^b	5.4-6.5	1.5
		RE73-99-0041	8-8.5	8-8.5	
	73-02205	0173-96-0258	2.7-3.8 ^b	5.5-6.6	1.4
		RE73-99-0042	8-8.5	8-8.5	
C-73-005(b)	73-02199	0173-96-0263	1.3-2.1 ^b	4.3-5.1	3.65 ^c
		RE73-99-0039	8.75-9	8.75-9	
	73-02200	0173-96-0262	1-2 ^b	4-5	3.75 ^c
		RE73-99-0038	8.75-9	8.75-9	
C-73-005(c)	73-02197	0173-96-0268	0-0.8 ^b	1.2-2	3 ^d
		RE73-99-0036	5-5.5	5-5.5	
	73-02198	0173-96-0269	0.4-1.2 ^b	1.6-2.4	2.6 ^d
		RE73-99-0037	5-5.5	5-5.5	
C-73-005(d)	73-02195	0173-96-0271	1.9-2.9 ^b	5.4-6.4	2.1
		RE73-99-0034	8.5-9	8.5-9	
	73-02196	0173-96-0272	1.5-2.5 ^b	5-6	2.5
		RE73-99-0035	8.5-9	8.5-9	
C-73-005(e)	73-02193	0173-96-0274	1-1.9 ^b	2.4-3.3	0.7
		RE73-99-0032	4-4.5	4-4.5	
	73-02194	0173-96-0275	1-2 ^b	2.4-3.4	0.6
		RE73-99-0033	4-4.5	4-4.5	
C-73-005(f)	73-02191	0173-96-0280	1.5-2.5 ^b	2-3	1.5
		RE73-99-0030	4.5-5	4.5-5	
	73-02192	0173-96-0281	1.5-2.5 ^b	2-3	1.5
		RE73-99-0031	4.5-5	4.5-5	

a All sample intervals referenced to ground surface.

b Sample interval referenced to top of fill within septic pit.

c When the septic pit was backfilled in 1996, it was backfilled to an elevation approximately 1.75 feet above the original ground level. The actual intervals between the 1996 and 1999 samples were therefore approximately 2 feet, obtained by subtracting 1.75 feet from 3.65 and 3.75 feet.

d When the septic pit was backfilled in 1996, it was backfilled to an elevation approximately 1 foot above the original ground level. The actual intervals between the 1996 and 1999 samples were therefore approximately 2 feet, obtained by subtracting 1 foot from 3 and 2.6 feet.

Table 3
Geomorphic Mapping Units in Reaches DP-1 East, DP-2, and DP-3

Reach	Unit	Estimated Ave. Unit Height Above Channel (m)	Sediment Facies	Estimated Ave. Thickness (m)	Notes
DP-1 East	c1	0	Coarse	0.25	Active Channel
	c2	0.38	Fine	0.33	Younger abandoned post-1942 channel
			Coarse	0.09	
	c3	1.06	Fine	0.62	Older abandoned post-1942 channel
			Coarse	0.21	
f1	1.42	Fine	0.42	Active floodplain	
DP-2	c1	0	Coarse	0.5	Active channel
	c2	0.4	Fine	0.37	Younger abandoned post-1942 channel
			Coarse	0.5	
	c3a	0.73	Fine	0.53	Older abandoned post-1942 channel
			Coarse	0.5	
	c3b	0.80	Fine	0.42	Older abandoned post-1942 channel
			Coarse	0.5	
	f1	1.14	Fine	0.43	Active floodplain
Coarse			NA		
DP-3	c1	0	Coarse	0.25	Active channel
	c2	0.6	Fine	0.37	Sand and gravel bars adjacent to active channel
			Coarse	0.25	
	c3a	0.74	Fine	0.45	Younger abandoned post-1942 channel
			Coarse	0.25	
	c3b	0.87	Fine	0.65	Older abandoned post-1942 channel
			Coarse	0.25	
f1	1.64	Fine	0.7	Active floodplain	
f2	0.88	Fine	0.72	Potentially active floodplain	