

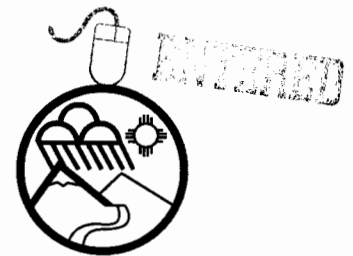


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PETER MAGGIORE
SECRETARY

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 17, 2002

Dr. Inés Triay, Manager
Carlsbad Field Office
Department of Energy
P. O. Box 3090
Carlsbad, New Mexico 88221-3090

Mr. John Lee, General Manager
Westinghouse TRU Solutions LLC
P.O. Box 2078
Carlsbad, New Mexico 88221-5608

**RE: NMED SPLIT SOIL SAMPLE RESULTS FROM SOLID WASTE MANAGEMENT UNITS AT
WIPP
WASTE ISOLATION PILOT PLANT
EPA I.D. NUMBER NM4890139088**

Dear Dr. Triay and Mr. Lee:

The purpose of this letter is to provide the Department of Energy Carlsbad Field Office and Westinghouse TRU Solutions LLC (**the Permittees**) with the results of analyses of split samples obtained by Mr. William Fetner, a representative of the New Mexico Environment Department (**NMED**), on August 20 through 22, 2001. The samples in question are split soil samples collected with the Permittees during their field investigation of two Solid Waste Management Units (**SWMUs**) at WIPP, specifically Sites 0011 (WIPP-12/P-5) and 001x (WIPP-13). The field investigations are part of the corrective action activities required by Module VII of the Hazardous Waste Facility Permit and are described in the Permittees' Facility Work Plan (submitted in February 2000), the Sampling and Analysis Plan (submitted in May 2000), and subsequent correspondence and conference calls between the Permittees and NMED. The Permittees investigated four SWMUs during the week of August 20-24, 2001 (Sites 0011, 001q, 001x and 004a), and submitted sample location maps with preliminary analytical results in an October 26, 2001 letter to NMED.

A total of 12 samples were split with the Permittees on August 20-22. NMED was not present during the sampling activities of Sites 001q and 004a and thus no split samples were collected from these sites. The Permittees collected all samples, including splits, using their sampling equipment and techniques. Of the 12 split samples, 5 were collected from Site 001x on August

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20 and 7 samples were collected from Site 0011 on August 21 and 22. Quality assurance samples consisted of a duplicate sample (WST-01-086B1, duplicate of WST-01-085B1) and an equipment blank (the only aqueous sample - WST-01-090). NMED labeled all split samples with the same identification number used by the Permittees and specified that they be analyzed for the same parameters using the same EPA methods (EPA Method 6010 for barium and chromium and EPA Method 6020 for lead). NMED delivered the split samples to Pinnacle Laboratories, Inc. of Albuquerque, on August 22. Envirotest Laboratories LLC of Casper, Wyoming, performed the analyses as a subcontractor to Pinnacle Laboratories. Attached is a table listing the split samples and showing the concentrations detected by NMED's contractor. In addition to other miscellaneous information on the split samples (i.e., location, depth), the table contains the analytical results from the Permittees as reported by their laboratory contractor (Wastren Laboratories, Inc.).

NMED's analytical results were validated by TechLaw, Inc. of Denver, Colorado, in accordance with the document "Test Methods for Evaluating Solid Wastes, SW-846, 3rd Edition" (third update 1996), and the USEPA CLP National Functional Guidelines for Evaluating Inorganic Analyses, February 1994. TechLaw's validation concluded that all NMED data are usable for the intended purpose of comparing split sample results. As shown on the attached table, NMED split results are generally comparable to those reported by the Permittees. With the exception of six samples (including the equipment blank), all other split sample results were within 35 percent difference in concentrations. Differences in concentration are not uncommon given the heterogeneous nature of soil samples (discrepancies can occur due to incomplete sample mixing or laboratory error). It is important to note that, except for one sample (WST-01-096B2), the same soil samples from NMED and from the Permittees exceeded background concentrations established for the SWMUs (total of 8 soil samples).

Please contact William Fetner of my staff at (505) 428-2520 if you have any questions or require additional explanation on any of the items discussed in this letter.

Sincerely,



Steve Zappe
WIPP Project Leader
Permits Management Program

Attachment

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cc: James Bearzi, Chief, HWB
John Kieling, Manager, Permits Management Program, HWB
Will Fetner, HWB
Laurie King, EPA Region 6
Connie Walker, TechLaw
Bob Thielke, TechLaw



SWMU SPLIT SOIL SAMPLE SUMMARY AND COMPARISON (NMED AND WTS)

SWMU SITE	SAMPLE ID.	PARAMETER ANALYZED	NMED RESULTS (mg/kg) ²	MDL (mg/kg)	WTS RESULTS (mg/kg) ²	MDL (mg/kg)	CONCENTRATION DIFFERENCE (mg/kg) AND % DIFFERENCE BETWEEN NMED AND WTS RESULTS ³	SAMPLE LOCATION	SAMPLE DEPTH	DATE SAMPLED
001L	WST-01-090 ¹	BARIUM	<0.005	0.005	0.0119	?	0.0069 / 138%	Equipment blank prior to 091D	N/A	8/21/2001
	WST-01-091D	BARIUM	1330	0.1	1450	?	120 / 9%	Inside mud pit, deep-deep	8-9'	8/21/2001
	WST-01-092A1	BARIUM	1370	0.1	1170	?	200 / 15%	Inside mud pit, shallow	3-27"	8/21/2001
	WST-01-094A2	BARIUM	356	0.1	398	?	42 / 12%	Inside mud pit, deep	7-8'	8/21/2001
	WST-01-095B1	BARIUM	25.0	0.1	28.3	?	3.3 / 13%	Outside mud pit, shallow	24-48"	8/21/2001
	WST-01-096B2	BARIUM	133	0.1	197	?	64 / 48%	Outside mud pit, deep	7-8'	8/21/2001
WST-01-099F1	BARIUM	510	0.1	426	?	84 / 16%	Inside mud pit, shallow	12-36"	8/22/2001	
001X	WST-01-085B1	BARIUM	359	0.1	2230	?	1871 / 521%	Inside mud pit, shallow	6-30"	8/20/2001
		CHROMIUM	20.3	0.2	13.4	?	6.9 / 34%			
		LEAD	21.0	0.4	11	?	10.0 / 48%			
	WST-01-086B1	BARIUM	846	0.1	1790	?	944 / 116%	Duplicate of above sample	6-30"	8/20/2001
		CHROMIUM	16.1	0.2	17.9	?	1.8 / 11%			
		LEAD	13.8	0.4	15	?	1.2 / 9%			
	WST-01-087B2	BARIUM	34.3	0.1	31.5	?	2.8 / 8%	Inside mud pit, deep	7-8'	8/20/2001
		CHROMIUM	8.2	0.2	7.1	?	1.1 / 13%			
		LEAD	4.9	0.4	4.3	?	0.6 / 6%			
	WST-01-088E1	BARIUM	14.7	0.1	16.1	?	1.4 / 10%	Outside mud pit, shallow	6-30"	8/20/2001
		CHROMIUM	3.2	0.2	4.7	?	1.5 / 47%			
		LEAD	1.9	0.4	1.8	?	0.1 / 5%			
	WST-01-089E2	BARIUM	53.2	0.1	36	?	17.2 / 32%	Outside mud pit, deep	7-8'	8/20/2001
		CHROMIUM	10.7	0.2	8.8	?	1.9 / 18%			
		LEAD	5.4	0.4	4.5	?	0.9 / 17%			

NOTES:

- NMED = New Mexico Environment Department.
- WTS = Westinghouse TRU Solutions LLC.
- MDL = method detection limit.
- SSL = soil screening levels.
- ¹ = Liquid QA/QC sample - units reported in mg/L. WTS' result was above the detection limit.
- ² = **Bold** results on these columns exceed the established background concentration for that parameter (see table on right).
- ³ = **Bold** results on this column exceed 35% difference in concentration between NMED and WTS.
- ? = Information not yet available from WTS.
- No concentrations were found exceeding NMED's residential SSLs.
- Except for one sample, samples exceeding background levels were consistent between NMED and WTS. The exception was sample WST-01-096B2 which WTS reported a higher concentration for barium exceeding background.
- Barium and chromium were analyzed by EPA Method 6010 and lead was analyzed by EPA Method 6020.
- NMED contracted Pinnacle Laboratories, Inc., of Albuquerque, NM. Pinnacle subcontracted the analyses to EnviroTest Laboratories, Inc., of Casper, WY.
- WTS contracted Wastren Laboratories, Inc., of Grand Junction, CO.

Target goals in mg/kg:

	Background	NM Residential SSLs
Barium:	170	5,200
Chromium:	26	230
Lead:	5.4	400