

NEW MEXICO ENVIRONMENT DEPARTMENT

DOE Oversight Bureau

604B N Canal Street Carlsbad, NM 88220 Phone (575) 887-6851 Fax (575) 887-6862 www.nmenv.state.nm.us



Station A Exhaust Air Monitoring at the Waste Isolation Pilot Plant Conducted by the New Mexico Environment Department, DOE Oversight Bureau, April – June 2010

The New Mexico Environment Department DOE Oversight Bureau has compiled and assessed data collected from Station A for April through June, 2010. The accompanying data report shows results for selected analytes as determined by an independent analytical laboratory.

For americium-241, results for May and June were above the sample Minimum Detectable Concentration (MDC), but below the requested MDC. The result for plutonium-238 for April was also above the sample MDC, while below he requested MDC. However, the results from the sample blank for both these two analytes were also above the sample MDC and below the requested MDC.

For the remaining requested analytes, results indicated no detections above the sample MDC.

Response

Questions and or comments may be addressed to Thomas Kesterson by phone at 575-887-6851, by email at thomasl.kesterson@state.nm.us, or to the address in the above letterhead.

Enclosure: (1) Table 1 – Laboratory Results for Selected Analytes from Station A, April – June, 2010.

(2) Definitions

Cc: Dan Ferguson, Site Regulatory Specialist, DOE / CBFO George Basabilvazo, DOE / CBFO Barry Birch, Program Manager, NMED DOE OB/WOS Table 1 – Laboratory Results for Selected Analytes from Station A, April – June, 2010.

Apr-10	Analytical Results					Data Summaries	
Station A		Monthly					
Analyte	Result	2 s	Sample	Requested	Lab	Result	2 s
	pCi/composite		MDC	MDC MDC Flag		nBq/m ³	
Sr-90	0.25	0.30	0.64	1	U	3842	4610
Pu-239/40	0.011	0.019	0.033	0.1	U	169	292
Pu-238	0.029	0.021	0.0098	0.1	LT	446	323
Am-241	0.020	0.019	0.024	0.1	U	307	292
Cs-137	-1.0	5.5	9.7	10	U	-15368	84523
U-234	0.020	0.042	0.060	0.2	U	307	645
U-235	-0.0081	0.049	0.085	0.2	U	-124	753
U-238	0.023	0.042	0.031	0.2	U	353	645
	(m^3)	(ft ³)					
Total Air Flow	2408	85044					

May-10 Station A	Analytical Results Monthly Composite Sample					Data Summaries	
Analyte	Result	2 s	Sample	Requested	Lab	Result	2 s
	pCi/composite		MDC	MDC	Flag	nBq/m^3	
Sr-90	0.077	0.31	0.68	1	U	1161	4675
Pu-239/40	0	0.025	0.051	0.1	U	0	377
Pu-238	0.022	0.021	0.027	0.1	U	332	317
Am-241	0.014	0.018	0.0098	0.1	LT	211	271
Cs-137	-0.22	5.1	9.0	10	U	-3318	76913
U-234	0.026	0.052	0.11	0.2	U	392	784
U-235	0.0017	0.060	0.12	0.2	U	26	905
U-238	0.026	0.052	0.11	0.2	U	392	784
	(m^3)	(ft^3)					
Total Air Flow	2453	86662					

Table 1 – Laboratory Results for Selected Analytes from Station A, April – June, 2010.

Jun-10	Analytical Results					Data Summaries	
Station A	Monthly Composite Sample						
Analyte	Result	2 s	Sample	Requested	Lab	Result	2 s
	pCi/composite		MDC MDC		Flag	nBq/m ³	
Sr-90	-0.14	0.32	0.72	1	U	-2153	4922
Pu-239/40	0.011	0.019	0.033	0.1	U	169	292
Pu-238	0.014	0.020	0.033	0.1	U	215	308
Am-241	0.0099	0.016	0.0089	0.1	LT	152	246
Cs-137	0.65	5.2	9.0	10	U	9998	79984
U-234	0.0051	0.046	0.080	0.2	U	78	708
U-235	0.010	0.054	0.078	0.2	U	154	831
U-238	0.030	0.046	0.080	0.2	U	461	708
_	(m^3)	(ft ³)					
Total Air Flow	2405	84969					

Blank filter April - June 2010 Station A							Data Summaries	
Analyte	Result	2 s	MDC	Requested		Result	2 s	
	pCi/cor	pCi/composite		MDC	Lab Flag	nBq/cor	nposite	
Sr 90	0.44	0.32	0.64	1	U	6768	4922	
Pu-239/40	0.035	0.026	0.028	0.1	LT	538	400	
Pu-238	0.035	0.024	0.010	0.010	LT	538	369	
Am 241	0.039	0.032	0.036	0.1	LT	600	492	
Cs 137	0.058	4.5	7.8	10	U	892	69217	
U-234	0	0.047	0.13	0.2	U	0	723	
U-235	0.039	0.058	0.11	0.2	U	600	892	
U-238	-0.0012	0.043	0.110	0.2	U	-18	661	

Definitions:

Qualifiers / Flags

U – Result is less than the sample specific MDC. LT – Result is less than Requested MDC, greater than sample specific MDC.

Abbreviations:

TPU – Total Propagated Uncertainty MDC – Minimum Detectable Concentration