

NEW MEXICO
ENVIRONMENT DEPARTMENT



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August 3, 2011

George Basabilvazo
Department of Energy
Carlsbad Field Office
Carlsbad, NM 88220

**Subject: Station A Exhaust Air Monitoring at the Waste Isolation Pilot Plant
Conducted by the New Mexico Environment, DOE Oversight Bureau, July –
December 2010.**

Mr. Basabilovazo,

This letter transmits the subject final report.

These results are provided to DOE as final. If you have any questions, or would like copies of the complete data set, please contact me at 575-887-6851.

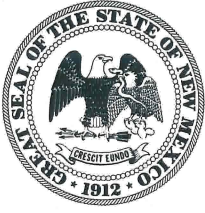
Sincerely,

Thomas Kesterson
Environmental Specialist –O
WIPP Oversight Section

Enclosure: Final submittal entitled: “Station A Exhaust Air Monitoring at the Waste Isolation Pilot Plant Conducted by the New Mexico Environment Department, DOE Oversight Bureau, July - December 2010, with the following enclosures:

- (1) Table 1 – Laboratory Results for Selected Analytes from Station A, July – December 2010, including blanks.

Cc: Dan Ferguson, Site Regulatory Specialist, DOE / CBFO
Thomas Skibitski, Chief, NMED DOE OB



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

The New Mexico Environment Department DOE Oversight Bureau has compiled and assessed data collected from Station A for July through December 2010. The accompanying data Table 1 shows results for selected analytes as determined by an independent analytical laboratory.

There were no detections for Sr-90, Cs-137, or U-235 during this time. Concentrations of U-234 were detected in the filters collected for the months of September, November, and December, while U-238 was also detected in the filters collected during December. Concentrations of Pu-238 were detected in those filters collected during both July and November, while Pu-239/240 was detected in August. Concentrations of Am-241 were detected in August and September. It should be noted that Pu-238 and Am-241 were detected in the sample blanks, as well, indicating the results for the months showing detections are questionable.

Response

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

Enclosure: (1) Table 1 – Laboratory Results for Selected Analytes from Station A, July – December, 2010

Cc: Dan Ferguson, Site Regulatory Specialist, DOE / CBFO
George Basabilvazo, DOE / CBFO
Thomas Skibitski, Chief, NMED DOE OB

<i>Table-1A</i> <i>Jul-10</i> <i>Station A</i>	Analytical Results Monthly Composite Sample					<i>Data Summaries</i>		
	Analyte	Result	2 s	Sample	Requested	Lab	Result	2 s
		pCi/composite		MDC	MDC	Flag	nBq/m ³	
Sr-90	0.18	0.22	0.46	1	U	2909	3556	
Pu-239/40	0.017	0.023	0.034	0.1	U	275	372	
Pu-238	0.019	0.023	0.017	0.1	LT	307	372	
Am-241	0.012	0.025	0.036	0.1	U	194	404	
Cs-137	-1.0	4.9	8.7	10	U	-16164	79202	
U-234	0.014	0.027	0.056	0.2	U	226	436	
U-235	0.001	0.026	0.05	0.2	U	12	420	
U-238	0.005	0.022	0.048	0.2	U	81	356	
Total Air Flow	(m ³)	(ft ³)						
	2289	80857						

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

<i>Table-1B</i> <i>Aug-10</i> <i>Station A</i>	Analytical Results Monthly Composite Sample					<i>Data Summaries</i>			
	Analyte	Result	2 s	Sample	Requested	Lab	Result	2 s	
		pCi/composite		MDC	MDC	Flag	nBq/m ³		
Sr-90	0.09	0.22	0.49	1	U	1402	3352		
Pu-239/40	0.033	0.030	0.018	0.1	LT	503	457		
Pu-238	0.019	0.028	0.052	0.1	U	290	427		
Am-241	0.041	0.034	0.019	0.1	LT	625	518		
Cs-137	0.0	4.9	8.7	10	U	0	74667		
U-234	0.031	0.035	0.060	0.2	U	472	533		
U-235	0.003	0.027	0.047	0.2	U	46	411		
U-238	0.011	0.023	0.049	0.2	U	168	350		
Total Air Flow	(m ³)	(ft ³)							
	2428	85768							

Qualifiers / Flags

U – Result is less than the sample specific MDC.

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Abbreviations:

TPU – Total Propagated Uncertainty

MDC – Minimum Detectable Concentration

<i>Table-1C</i> <i>Sep-10</i> <i>Station A</i>	Analytical Results Monthly Composite Sample					<i>Data Summaries</i>			
	Analyte	Result	2 s	Sample	Requested	Lab	Result	2 s	
		pCi/composite		MDC	MDC	Flag	nBq/m ³		
Sr-90	-0.07	0.20	0.46	1	U	-1112	3270		
Pu-239/40	0.022	0.027	0.041	0.1	U	360	441		
Pu-238	0.007	0.024	0.018	0.1	U	106	392		
Am-241	0.034	0.030	0.032	0.1	LT	556	490		
Cs-137	1.6	5.0	8.6	10	U	26159	81747		
U-234	0.048	0.038	0.041	0.2	LT	785	621		
U-235	0.000	0.027	0.020	0.2	U	0	441		
U-238	0.017	0.023	0.034	0.2	U	278	376		
Total Air Flow	(m ³)	(ft ³)							
	2263	79939							

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

<i>Table-1D</i> <i>Oct-10</i> <i>Station A</i>	Analytical Results Monthly Composite Sample					<i>Data Summaries</i>			
	Analyte	Result	2 s	Sample	Requested	Lab	Result	2 s	
		pCi/composite		MDC	MDC	Flag	nBq/m ³		
Sr-90	-0.04	0.22	0.49	1	U	-520	3270		
Pu-239/40	0.007	0.021	0.042	0.1	U	97	312		
Pu-238	0.004	0.021	0.031	0.1	U	61	312		
Am-241	0.023	0.025	0.032	0.1	U	342	372		
Cs-137	-3.1	5.1	9.4	10	U	-46084	75816		
U-234	0.011	0.024	0.053	0.2	U	164	357		
U-235	0.020	0.027	0.047	0.2	U	297	401		
U-238	0.013	0.020	0.035	0.2	U	193	297		
Total Air Flow	(m ³)	(ft ³)							
	2489	87916							

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

<i>Table-1E</i> <i>Nov-10</i> <i>Station A</i>	Analytical Results Monthly Composite Sample					<i>Data Summaries</i>			
	Analyte	Result	2 s	Sample	Requested	Lab	Result	2 s	
		pCi/composite		MDC	MDC	Flag	nBq/m ³		
Sr-90	0.10	0.23	0.50	1	U	1553	3573		
Pu-239/40	0.017	0.025	0.044	0.1	U	264	388		
Pu-238	0.035	0.032	0.019	0.1	LT	544	497		
Am-241	0.030	0.032	0.048	0.1	U	466	497		
Cs-137	-3.2	4.3	7.9	10	U	-49709	66796		
U-234	0.038	0.033	0.038	0.2	LT	590	513		
U-235	-0.004	0.025	0.044	0.2	U	-65	388		
U-238	0.002	0.022	0.038	0.2	U	37	342		
Total Air Flow	(m ³)	(ft ³)							
	2382	84135							

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

<i>Table-1F</i> <i>Dec-10</i> <i>Station A</i>	Analytical Results Monthly Composite Sample					<i>Data Summaries</i>			
	Analyte	Result	2 s	Sample	Requested	Lab	Result	2 s	
		pCi/composite		MDC	MDC	Flag	nBq/m ³		
Sr-90	-0.03	0.25	0.58	1	U	-734	5394		
Pu-239/40	0.016	0.024	0.041	0.1	U	345	518		
Pu-238	0.007	0.024	0.018	0.1	U	140	518		
Am-241	0.019	0.023	0.035	0.1	U	410	496		
Cs-137	5.2	4.3	6.8	10	U	112187	92770		
U-234	0.15	0.07	0.05	0.2	LT	3236	1445		
U-235	0.029	0.033	0.050	0.2	U	626	712		
U-238	0.099	0.054	0.051	0.2	LT	2136	1165		
Total Air Flow	(m ³)	(ft ³)							
	1715	60579							

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

Table-1G**Blank filter July - December 2010****Station A**

Analyte	Result	2 s	MDC	Requested	Lab Flag
	pCi/composite			MDC	
Sr 90	-0.18	0.19	0.45	1	U
Pu-239/40	0.003	0.031	0.054	0.1	U
Pu-238	0.043	0.039	0.023	0.01	LT
Am 241	0.027	0.028	0.019	0.1	LT
Cs 137	-0.5	4.1	7.1	10	U
U-234	0.008	0.025	0.059	0.2	U
U-235	-0.002	0.028	0.041	0.2	U
U-238	0.014	0.024	0.047	0.2	U

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