

NEW MEXICO
ENVIRONMENT DEPARTMENT



DOE Oversight Bureau

SUSANA MARTINEZ
Governor

406 North Guadalupe Street
Carlsbad, New Mexico 88220

DAVE MARTIN
Secretary

JOHN A. SANCHEZ
Lieutenant Governor

Phone (575) 885-9023 Fax (575) 887-9283

BUTCH TONGATE
Deputy Secretary

www.nmenv.state.nm.us

JAMES H. DAVIS, Ph.D.
Director
Resource Protection Division

July 9, 2012

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 Department, DOE Oversight Bureau, July – December, 2011

Mr. Basabilvazo,

This letter transmits the subject report as final.

The monitoring results are provided to DOE. If you have any questions, or would like copies of the complete data set, please contact me at 575-885-9023.

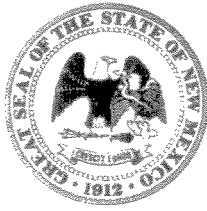
Sincerely,

Thomas Kesterson
Environmental Specialist –O
WIPP Oversight Section

Enclosure: Draft data 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, 2011", with the following enclosures:

- (1) Table 1 – Laboratory Results for Selected Analytes from Station A, July – December, 2011.

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



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

DOE Oversight Bureau

406 North Guadalupe Street
Carlsbad, New Mexico 88220
Phone (575) 885-9023 Fax (575) 887-9283
www.nmenv.state.nm.us



DAVE MARTIN
Secretary

BUTCH TONGATE
Deputy Secretary

JAMES H. DAVIS, Ph.D.
Director
Resource Protection Division

**Station A Exhaust Air Monitoring at the Waste Isolation Pilot Plant Conducted by the
New Mexico Environment Department, DOE Oversight Bureau, July – December, 2011**

The New Mexico Environment Department DOE Oversight Bureau has compiled and assessed data collected from Station A for July – December, 2011. The accompanying data report shows results for selected analytes and sample blanks as determined by an independent analytical laboratory.

Results

U-234 was detected above the sample Minimum Detectable Concentration (MDC) in July and October, while in November there was a detection of U-238 above the sample MDC. These are in agreement with results obtained by Carlsbad Environmental Monitoring and Research Center (CEMRC) in their Station A results.

There were also detections of Am-241 above the sample MDC for July and December. However, there was also a detection above the MDC in the sample blank, so these results are considered questionable. CEMRC reported no detections of Am-241 for either of those months.

Table 1 shows the laboratory results for selected analytes.

Response

Questions and or comments may be addressed to Thomas Kesterson by phone at 575-885-9023, by e-mail 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, July -
December, 2011

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

Table 1: Station A Results for July through December, 2011

<i>Jul-11 Station A</i>	Analytical Results Monthly Composite Sample				<i>Data Summaries</i>	
Analyte	Result	2s TPU	Sample	Lab	Result	2s TPU
	pCi/composite		MDC	Flag	nBq/m ³	
Sr-90	1.68E-01	3.80E-01	6.95E-01	U	2.56E+03	5.78E+03
Pu-239/40	-4.98E-03	2.60E-02	5.99E-02	U	-7.58E+01	3.96E+02
Pu-238	1.00E-02	1.70E-02	3.68E-02	U	1.52E+02	2.59E+02
Am-241	2.89E-02	2.20E-02	2.12E-02		4.40E+02	3.35E+02
Cs-137	2.10E-01	2.30E+00	4.06E+00	U	3.20E+03	3.50E+04
U-234	5.28E-02	4.10E-02	4.26E-02		8.04E+02	6.24E+02
U-235	4.52E-03	1.60E-02	4.26E-02	U	6.88E+01	2.44E+02
U-238	3.32E-02	3.90E-02	6.48E-02	U	5.05E+02	5.94E+02
Total Air Flow	(m ³) 2431	(ft ³) 85856				

<i>Aug-11 Station A</i>	Analytical Results Monthly Composite Sample				<i>Data Summaries</i>	
Analyte	Result	2s TPU	Sample	Lab	Result	2s TPU
	pCi/composite		MDC	Flag	nBq/m ³	
Sr-90	2.18E-01	3.50E-01	6.26E-01	U	3.31E+03	5.31E+03
Pu-239/40	1.79E-02	3.10E-02	6.59E-02	U	2.71E+02	4.70E+02
Pu-238	8.99E-03	2.50E-02	6.61E-02	U	1.36E+02	3.79E+02
Am-241	2.01E-02	3.00E-02	4.92E-02	U	3.05E+02	4.55E+02
Cs-137	8.27E-01	1.30E+00	2.46E+00	U	1.25E+04	1.97E+04
U-234	4.73E-02	4.20E-02	5.24E-02	U	7.17E+02	6.37E+02
U-235	2.74E-02	3.10E-02	4.31E-02	U	4.15E+02	4.70E+02
U-238	4.57E-03	1.60E-02	4.31E-02	U	6.93E+01	2.43E+02
Total Air Flow	(m ³) 2440	(ft ³) 86200				

<i>Sep-11 Station A</i>	Analytical Results Monthly Composite Sample				<i>Data Summaries</i>	
Analyte	Result	2s TPU	Sample	Lab	Result	2s TPU
	pCi/composite		MDC	Flag	nBq/m ³	
Sr-90	1.66E-02	3.80E-01	7.14E-01	U	2.79E+02	6.39E+03
Pu-239/40	2.78E-02	3.00E-02	4.09E-02	U	4.67E+02	5.04E+02
Pu-238	-5.56E-03	1.60E-02	4.10E-02	U	-9.34E+01	2.69E+02
Am-241	1.51E-02	2.00E-02	3.70E-02	U	2.54E+02	3.36E+02
Cs-137	1.48E-01	1.50E+00	2.58E+00	U	2.49E+03	2.52E+04
U-234	3.03E-02	3.50E-02	4.75E-02	U	5.09E+02	5.88E+02
U-235	0.00E+00	1.80E-02	4.75E-02	U	0.00E+00	3.02E+02
U-238	1.85E-02	3.00E-02	5.78E-02	U	3.11E+02	5.04E+02
Total Air Flow	(m ³) 3202	(ft ³) 77769				

Table 1: Station A Results for July through December, 2011

<i>Oct-11 Station A</i>	Analytical Results Monthly Composite Sample				<i>Data Summaries</i>	
Analyte	Result	2s TPU	Sample	Lab	Result	2s TPU
	pCi/composite		MDC	Flag	nBq/m ³	
Sr-90	-9.34E-03	3.50E-01	6.49E-01	U	-1.38E+02	5.17E+03
Pu-239/40	-4.25E-02	3.90E-02	9.21E-02	U	-6.28E+02	5.76E+02
Pu-238	4.74E-03	1.60E-02	3.49E-02	U	7.00E+01	2.36E+02
Am-241	6.01E-03	2.72E-02	5.58E-02	U	8.88E+01	4.02E+02
Cs-137	-1.08E+00	2.00E+00	3.36E+00	U	-1.60E+04	2.95E+04
U-234	8.77E-02	5.40E-02	4.27E-02		1.30E+03	7.98E+02
U-235	2.42E-02	3.20E-02	5.19E-02	U	3.58E+02	4.73E+02
U-238	4.69E-02	4.10E-02	5.19E-02	U	6.93E+02	6.06E+02
Total Air Flow	(m ³) 2504	(ft ³) 88466				

<i>Nov-11 Station A</i>	Analytical Results Monthly Composite Sample				<i>Data Summaries</i>	
Analyte	Result	2s TPU	Sample	Lab	Result	2s TPU
	pCi/composite		MDC	Flag	nBq/m ³	
Sr-90	1.06E-01	3.90E-01	7.25E-01	U	1.61E+03	5.94E+03
Pu-239/40	1.14E-02	2.80E-02	5.31E-02	U	1.74E+02	4.26E+02
Pu-238	1.15E-02	2.30E-02	4.21E-02	U	1.75E+02	3.50E+02
Am-241	1.15E-02	2.00E-02	4.25E-02	U	1.75E+02	3.05E+02
Cs-137	4.40E-01	2.20E+00	3.88E+00	U	6.70E+03	3.35E+04
U-234	1.01E-02	2.60E-02	5.77E-02	U	1.54E+02	3.96E+02
U-235	1.68E-03	1.90E-02	5.77E-02	U	2.56E+01	2.89E+02
U-238	6.72E-02	4.90E-02	4.75E-02		1.02E+03	7.46E+02
Total Air Flow	(m ³) 2430	(ft ³) 85818				

<i>Dec-11 Station A</i>	Analytical Results Monthly Composite Sample				<i>Data Summaries</i>	
Analyte	Result	2s TPU	Sample	Lab	Result	2s TPU
	pCi/composite		MDC	Flag	nBq/m ³	
Sr-90	1.50E-01	3.70E-01	6.75E-01	U	2.23E+03	5.49E+03
Pu-239/40	1.96E-02	2.40E-02	3.61E-02	U	2.91E+02	3.56E+02
Pu-238	9.82E-03	1.70E-02	4.56E-02	U	1.46E+02	2.52E+02
Am-241	4.96E-02	3.40E-02	3.65E-02		7.37E+02	5.05E+02
Cs-137	4.19E-01	1.30E+00	2.39E+00	U	6.22E+03	1.93E+04
U-234	1.90E-02	2.60E-02	4.13E-02	U	2.82E+02	3.86E+02
U-235	0.00E+00	1.60E-02	4.13E-02	U	0.00E+00	2.38E+02
U-238	1.17E-02	2.20E-02	4.13E-02	U	1.74E+02	3.27E+02
Total Air Flow	(m ³) 2491	(ft ³) 88005				

Table 1: Station A Results for July through December, 2011

<i>Blank filter July - December 2011</i>				
<i>Station A</i>				
Analyte	Result	2s TPU	MDC	Lab Flag
	pCi/composite			
Sr-90	3.94E-02	4.30E-01	8.03E-01	U
Pu-239/40	5.57E-03	1.90E-02	4.10E-02	U
Pu-238	1.67E-02	2.20E-02	4.10E-02	U
Am-241	6.20E-02	2.60E-02	1.63E-02	
Cs-137	2.52E+00	3.00E+00	5.47E+00	U
U-234	1.38E-02	2.00E-02	3.89E-02	U
U-235	1.38E-02	2.00E-02	3.89E-02	U
U-238	2.48E-02	2.80E-02	3.89E-02	U