Low-Volume Air Sampling Sites

Understanding the Data

Radioactive contamination is measured in a unit called disintegrations per minute (DPM) or Becquerel (BQ), which refers to how quickly a radioactive material is decaying, thus how quickly it is releasing radioactive particles and/or energy.

Most important to people is the dose received from radioactivity. Dose is measured in millirem. This measurement varies greatly, however, based on how long a person is exposed, how far away from the source of the radiation they are and what is between the person and the source.

Dose assessment modeling from the release data shows a potential dose of less than one millirem at the environmental sample locations outside the Land Withdrawal Area. The average person living in the United States receives an annual dose from exposure to naturally occurring and other sources of radiation of about 620 millirem. A person receives about 10 millirems from a single chest x-ray procedure.

The preliminary data at left is from initial on-site analysis. The final analysis from an off-site radiological laboratory, however, can take up to two weeks from sample retrieval. Comprehensive protocols are followed to ensure the results are accurate.

		WIPP Radiological Results								
		Results								
		Am-241			Pu-238			Pu-239/240		
Location	Filter Retrieval Date	dpm	Bq	Dose Equivalent (mrem)	dpm	Bq	Dose Equivalent (mrem)	dpm	Bq	Dose Equivalent (mrem)
A	2/15/2014	48.80	0.81333	3.2626	-0.003	-0.00005	-0.0002	3.670	0.06117	0.2454
A	2/18/2014	0.27	0.00450	0.0180	-0.006	-0.00010	-0.0003	0.010	0.00017	0.0007
B	2/17/2014	0.57	0.00955	0.0390	0.001	0.00002	0.0001	0.031	0.00051	0.0021
C	2/17/2014	0.11	0.00190	0.0077	-0.002	-0.00004	-0.0001	0.013	0.00021	0.0009
D	2/18/2014	0.02	0.00026	0.0011	0.003	0.00005	0.0002	0.003	0.00004	0.0002
E	2/17/2014	0.24	0.00407	0.0166	-0.003	-0.00004	-0.0001	0.014	0.00023	0.0009
F	2/18/2014	0.02	0.00037	0.0015	-0.009	-0.00016	-0.0005	0.001	0.00001	0.0000
G	2/18/2014	0.03	0.00049	0.0020	0.014	0.00023	0.0008	0.011	0.00019	0.0008