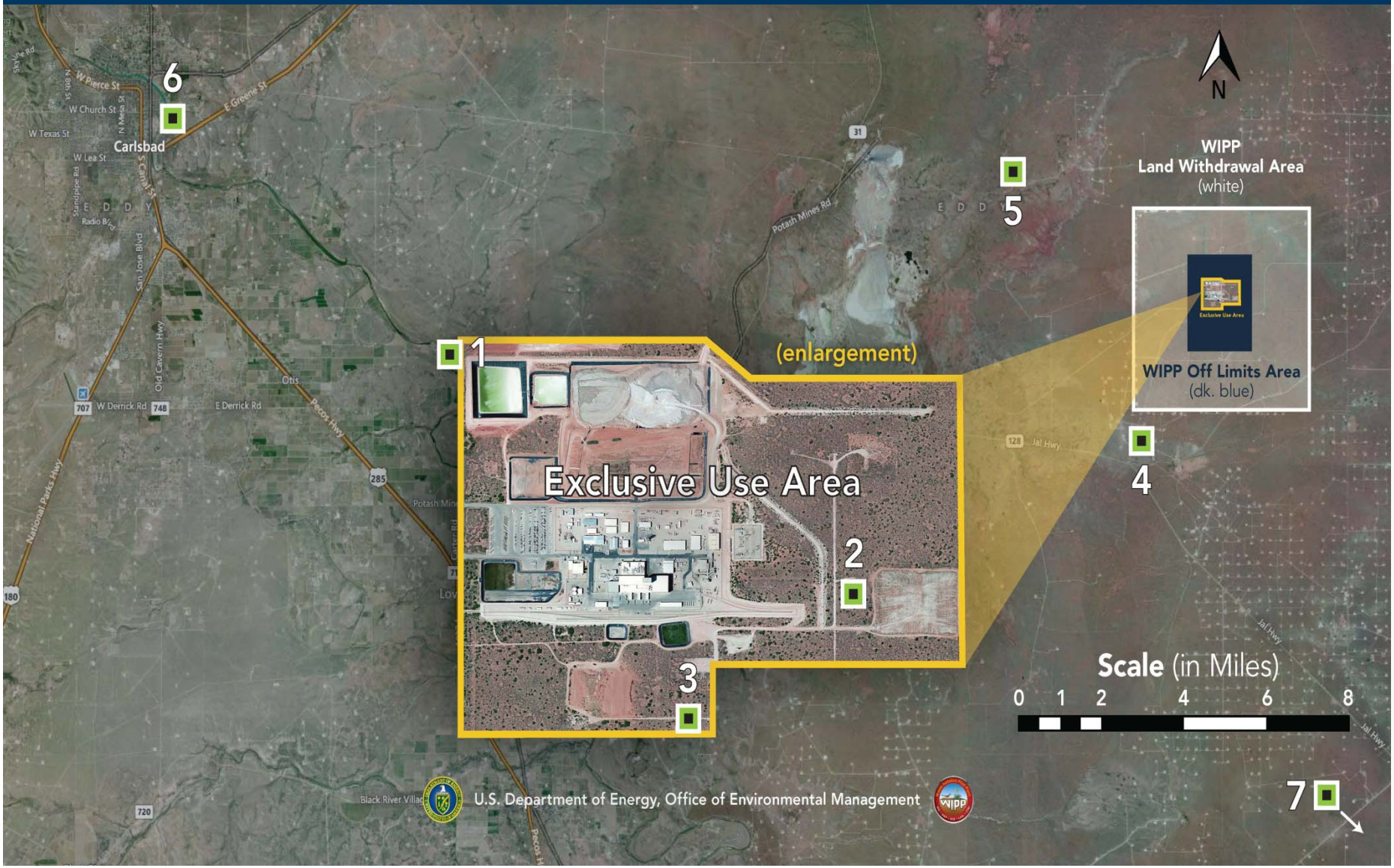
LOW-VOLUME AIR SAMPLING LOCATIONS



AIR SAMPLING RESULTS

Location	Filter Retrieval Date	Screening Analyses			WIPP Isotopic Analyses		
		Results		Dose Estimate (mrem)	Results		Dose Estimate (mrem)
		dpm/sample	Bq/sample		dpm/sample	Bq/sample	
1	2/15/2014	36	0.60	2	52	0.87	3
1	2/18/2014	2.4	0.040	0.1	0.28	0.0047	0.02
1	2/26/2014	1.9	0.032	0.1	Below MDC	Below MDC	N/A
1	3/4/2014	4.2	0.070	0.3	Below MDC	Below MDC	N/A
2	2/17/2014	4.4	0.073	0.3	0.61	0.010	0.04
2	2/26/2014	2.5	0.041	0.2	Below MDC	Below MDC	N/A
2	3/4/2014	4.9	0.082	0.3	Below MDC	Below MDC	N/A
3	2/17/2014	3.7	0.062	0.2	0.13	0.0021	0.009
3	2/26/2014	2.2	0.037	0.2	Below MDC	Below MDC	N/A
3	3/4/2014	3.3	0.054	0.2	Below MDC	Below MDC	N/A
4	2/18/2014	2.7	0.045	0.2	Below MDC	Below MDC	N/A
4	2/26/2014	2.6	0.043	0.2	Below MDC	Below MDC	N/A
4	3/4/2014	5.5	0.092	0.4	Below MDC	Below MDC	N/A
5	2/17/2014	4.2	0.070	0.3	0.26	0.0043	0.02
5	2/26/2014	1.1	0.019	0.07	Below MDC	Below MDC	N/A
5	3/4/2014	5.5	0.092	0.4	Below MDC	Below MDC	N/A
6	2/18/2014	1.6	0.027	0.1	Below MDC	Below MDC	N/A
6	2/26/2014	2.2	0.037	0.2	Below MDC	Below MDC	N/A
6	3/4/2014	7.1	0.12	0.5	Below MDC	Below MDC	N/A
7	2/18/2014	1.3	0.022	0.1	Below MDC	Below MDC	N/A
7	2/26/2014	2.7	0.044	0.2	Below MDC	Below MDC	N/A
7	3/4/2014	6.7	0.11	0.4	Below MDC	Below MDC	N/A

MDC = Minimum Detectable Concentration (An analytical laboratory limit below which any level present cannot be determined)

*The anticipated date for new results from the laboratory is March 24, 2014.

UNDERSTANDING THE AIR SAMPLING DATA

The previous table provides screening analyses for the amount of alpha and beta activity that has been detected since the February 14 radiological event. Radioactive contamination at WIPP is measured and reported in a unit called disintegrations per minute (dpm) or in units of Becquerel (Bq).

Dose is calculated and reported in millirem. Dose varies based on factors such as length of exposure and distance from the source of the radiation. 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. For more comparisons, see the millirem comparisons poster.

Dose estimates have been calculated based on the low-volume air sampler results. Low-volume air samplers collect samples at a rate of 2 cubic feet/minute to simulate a person's normal breathing rate.

The initial dose estimate assumes the person who might be exposed is standing next to the air sampler for 8.5 hours. The subsequent dose estimates assume the person who might be exposed is standing next to the air sampler throughout the sampling period.

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 analyses from an off-site radiological laboratory and additional results will be posted as they become available. Comprehensive protocols are followed to ensure the results are accurate.