Carlsbad Environmental Monitoring & Research Center

Mayor's Town Hall Presentation 5/1/14

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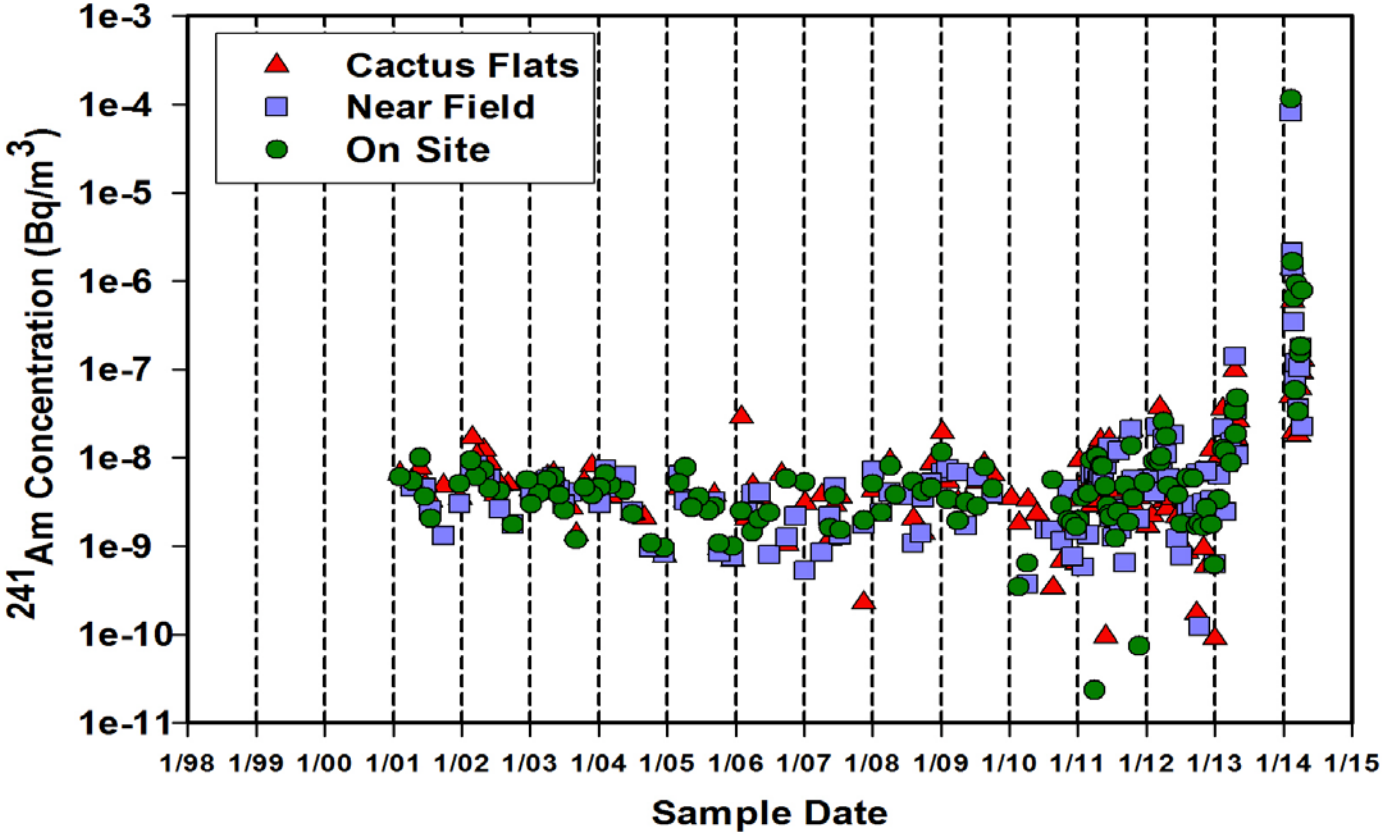
Air Sampling Results by Week

WIPP Exhaust Station A - Pre HEPA		*WIPP Exhaust Station B - Post*	*On-Site Air Sampler*	*Near Field Air Sampler*	*Cactus Flats Air Sampler*
Week	**241Am Bq/Sample**	**241Am Bq/Sample**	**241Am Bq/Sample**	**241Am Bq/Sample**	**241Am Bq/Sample**
#1 (2/15 - 2/21)	46,614.18	213.08	1.30	0.652	0.005
#2 (2/22 - 2/28)	9.24	0.94	0.020	0.017	0.007
#3 (3/1 - 3/7)	1.51	0.69	0.007	0.004	n/d
#4 (3/8 - 3/14)	1.90	0.40	n/d	n/d	0.001
#5 (3/15 - 3/21)	0.81	0.16	0.013	0.002	0.002
#6 (3/22 - 3/28)	1.12	0.05	**0.002**	n/d	n/d
#7 (3/29 - 4/4)	0.78	0.04	**0.001**	**0.010**	n/d
#8 (4/5 - 4/11)	0.41	0.04	**0.002**	**0.002**	n/d
#9 (4/12 - 4/18)	0.21	0.06	**0.010**	n/d	0.002

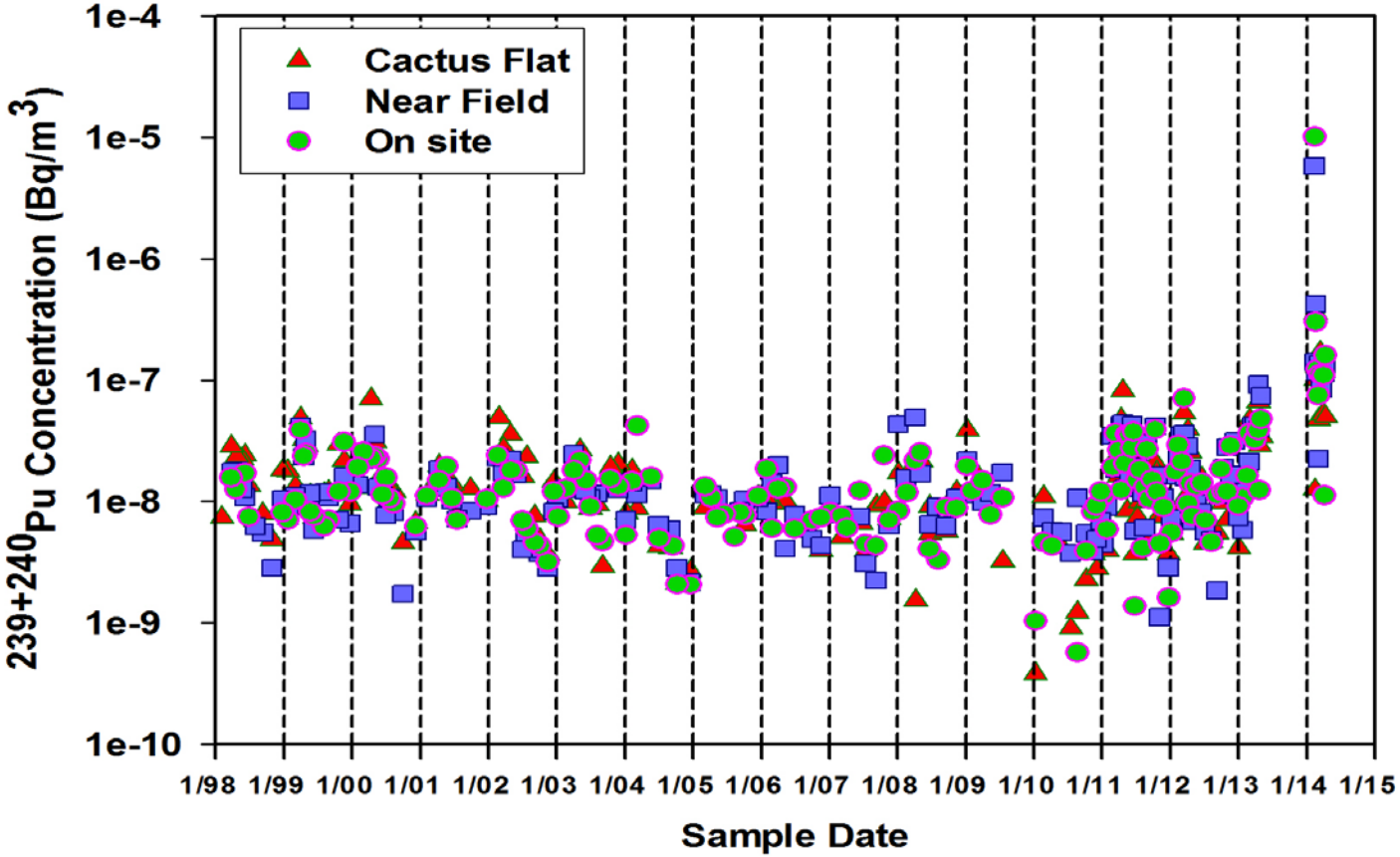
Station A & B values represent daily average per week

Values in red indicate revised results due to calculation errors found in V&V process

^{241}Am Historical Activity



$^{239+240}$Pu Historical Activity



Exposure Levels Revisited

- According to the Health Physics Society (Background Radiation Fact Sheet, June 2012), "the average dose from all inhaled radionuclides is about 2.3 mSv (millisieverts) per year".
  - 2.3 mSv is equal to 230 mrem.
  - DOE estimated dose at near field sampling station approx. 5 mrem.
  - 2.2 % of annual dose