

Carlsbad Environmental Monitoring & Research Center

Mayor's Town Hall Presentation 5/1/14

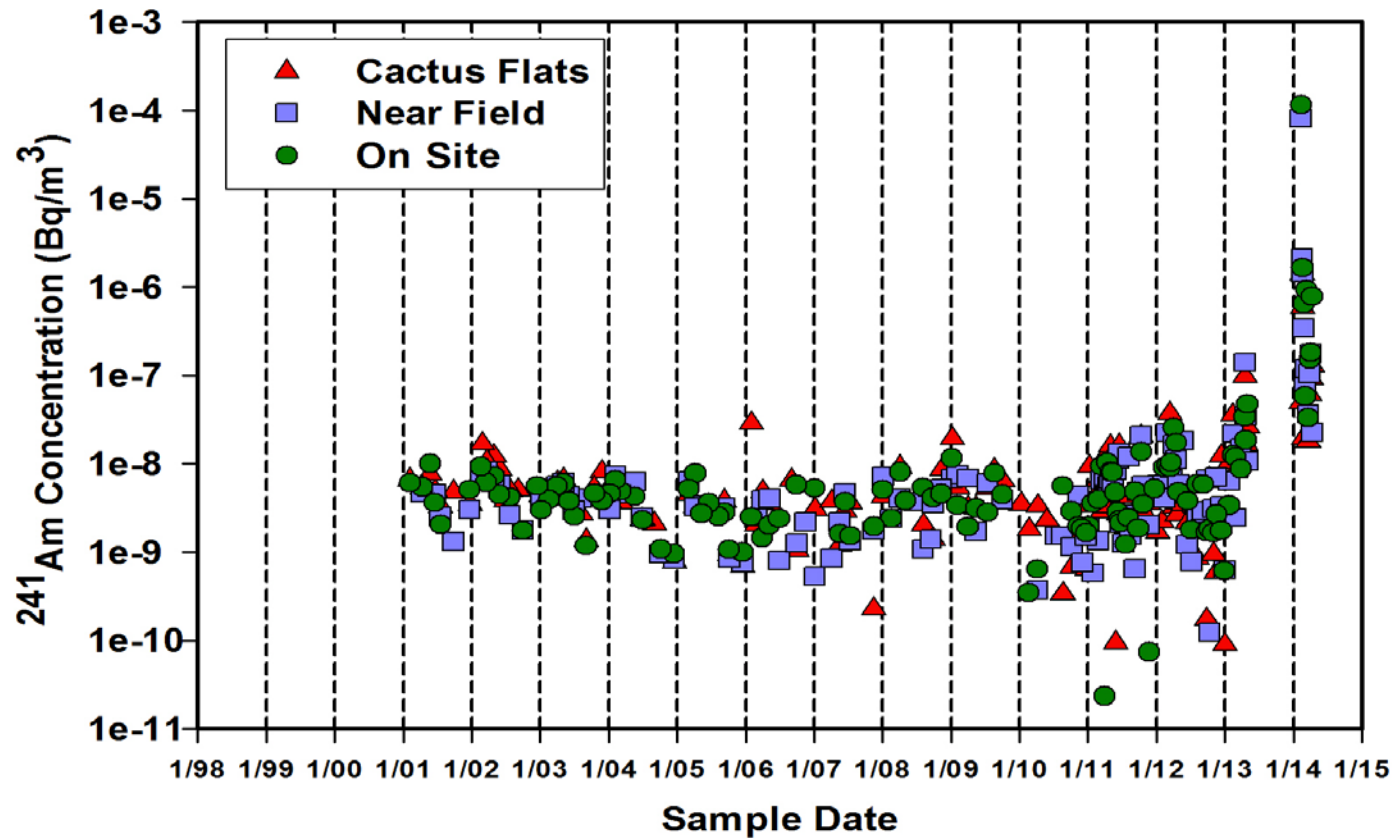
Dr. Russell Hardy, Director



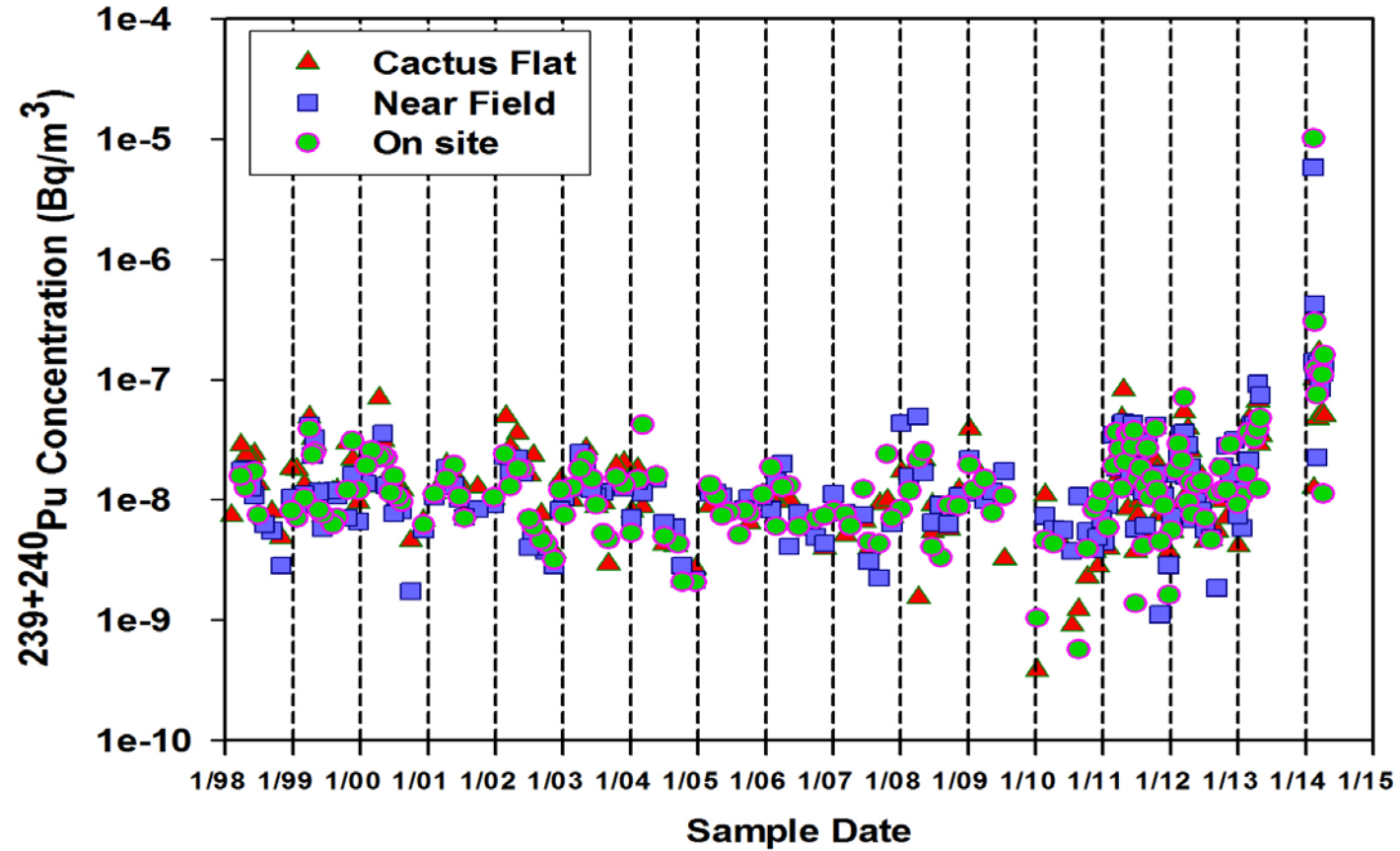
Air Sampling Results by Week

<i>WIPP Exhaust Station A - Pre HEPA</i>		<i>WIPP Exhaust Station B - Post</i>		<i>On-Site Air Sampler</i>		<i>Near Field Air Sampler</i>		<i>Cactus Flats Air Sampler</i>	
Week	241Am Bq/Sample	241Am Bq/Sample	241Am Bq/Sample	241Am Bq/Sample	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



$^{239+240}\text{Pu}$ 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