

TABLE I.1.2.1-3.—*Summary of 1994 Concentration Averages and Historical Averages for Radionuclides in Soils*

AREA/ SAMPLE NO.	URANIUM-234				URANIUM-238				U-234:U-238 RATIO	PLUTONIUM 239/240				TRITIUM			
	1994 AVERAGE (pCi/g)		HISTORICAL AVERAGE ⁵ (pCi/g)		1994 AVERAGE (pCi/g)		HISTORICAL AVERAGE ⁵ (pCi/g)		1994 SITE AVERAGE	1994 AVERAGE (pCi/g)		HISTORICAL AVERAGE (pCi/g)		1994 AVERAGE (pCi/g)		HISTORICAL AVERAGE (pCi/g)	
Firing Site 4									0.21								
FA-SS-01	1.02	±0.16	4.96	±0.53	6.33	±0.60	35.8	±2.45		0.03	±0.03	0.01	±0.02	NS ³		NS ³	
Average			4.96	±0.53			35.8	±2.45									
Firing Site 5									0.21								
FB-SS-01	5.13	±0.55	3.86	±0.33	38.6	±3.30	26.2	±1.07		0.03	±0.02	0.01	±0.02	NS ³		NS ³	
FB-SS-02	0.84	±0.13	1.67	±0.21	5.36	±0.49	9.27	±0.62		0.04	±0.03	0.01	±0.02	NS ³		NS ³	
FB-SS-03	0.84	±0.13	1.36	±0.18	4.93	±0.47	6.93	±0.43		0.03	±0.02	0.02	±0.02	NS ³		NS ³	
FB-SS-04	0.9	±0.15	1.31	±0.17	5.85	±0.57	6.02	±0.36		0.03	±0.03	0.02	±0.02	NS ³		NS ³	
FB-SS-05	1.19	±0.17	3.09	±0.42	8.02	±0.71	20.7	±1.26		0.04	±0.03	0.01	±0.02	NS ³		NS ³	
FB-SS-06	0.49	±0.10	1.66	±0.18	2.4	±0.27	5.3	±0.40		0.03	±0.03	0.01	±0.02	NS ³		NS ³	
FB-SS-07	0.42	±0.09	0.99	±0.16	2.04	±0.23	3.25	±0.29		0.03	±0.03	0.01	±0.02	NS ³		NS ³	
FB-SS-08	0.35	±0.08	0.82	±0.14	0.92	±0.14	2.06	±0.22		0.03	±0.03	0.01	±0.02	NS ³		NS ³	
FB-SS-09	1.16	±0.16	3.01	±0.26	7.48	±0.68	18.8	±1.05		0.03	±0.03	0.01	±0.02	NS ³		NS ³	
Average			1.97	0.23			10.95	0.63				0.01	0.02				
Firing Site 10									0.43								
FC-SS-01	0.33	±0.08	0.85	±0.14	1.14	±0.17	2.11	±0.21		0.04	±0.05	0.02	±0.02	NS ³		NS ³	
FC-SS-02	0.21	±0.06	0.78	±0.13	0.44	±0.09	1.52	±0.19		0.03	±0.03	0.02	±0.02	NS ³		NS ³	
FC-SS-03	0.18	±0.06	0.85	±0.15	0.26	±0.07	1.28	±0.15		0.02	±0.03	0.02	±0.02	NS ³		NS ³	
FC-SS-04	0.59	±0.10	1.16	±0.16	2.91	±0.31	4.55	±0.32		0.02	±0.03	0.01	±0.02	NS ³		NS ³	
FC-SS-05	0.39	±0.09	1.77	±0.17	1.43	±0.19	12.3	±0.39		0.04	±0.03	0.01	±0.02	NS ³		NS ³	
Average			1.08 ²	0.15			4.35	0.25				0.02	0.02				
Burning Ground									1.03								
BG-SS-01	0.3	±0.07	0.55	±0.12	0.35	±0.07	0.7	±0.13		0.02	±0.02	0.01	±0.02	0.16	±0.56	NS ²	
BG-SS-02	0.39	±0.08	0.56	±0.12	0.46	±0.08	0.64	±0.12		0.02	±0.03	0.01	±0.02	-0.03	±0.56	NS ²	
BG-SS-03	0.34	±0.07	0.62	±0.13	0.34	±0.07	0.78	±0.14		0.05	±0.03	0.02	±0.02	NS ³		NS ²	
BG-SS-04	0.31	±0.07	0.67	±0.14	0.33	±0.07	1.14	±0.15		0.04	±0.03	0.02	±0.02	0.12	±0.61	NS ²	

TABLE I.1.2.1–3.—Summary of 1994 Concentration Averages and Historical Averages for Radionuclides in Soils-Continued

AREA/ SAMPLE NO.	URANIUM-234				URANIUM-238				U-234:U-238 RATIO	PLUTONIUM 239/240				TRITIUM			
	1994 AVERAGE (pCi/g)		HISTORICAL AVERAGE ⁵ (pCi/g)		1994 AVERAGE (pCi/g)		HISTORICAL AVERAGE ⁵ (pCi/g)		1994 SITE AVERAGE	1994 AVERAGE (pCi/g)		HISTORICAL AVERAGE (pCi/g)		1994 AVERAGE (pCi/g)		HISTORICAL AVERAGE (pCi/g)	
BG-SS-05	0.33	±0.09	FS ²		0.42	±0.08	FS ²			0.04	±0.04	FS ²		0.13	±0.65	FS ²	
BG-SS-06	0.49	±0.09	FS ²		0.47	±0.09	FS ²			0.03	±0.04	FS ²		0.14	±0.49	FS ²	
BG-SS-07	0.41	±0.08	FS ²		0.42	±0.08	FS ²			0.02	±0.03	FS ²		0.06	±0.48	FS ²	
BG-SS-08	0.52	±0.10	FS ²		0.51	±0.09	FS ²			0.03	±0.04	FS ²		0.27	±0.54	FS ²	
BG-SS-09	0.37	±0.08	FS ²		0.4	±0.08	FS ²			0.02	±0.03	FS ²		0.23	±0.46	FS ²	
BG-SS-10	0.48	±0.10	FS ²		0.51	±0.10	FS ²			0.01	±0.03	FS ²		0.25	±0.56	FS ²	
BG-SS-11	0.43	±0.09	FS ²		0.44	±0.09	FS ²			0.01	±0.03	FS ²		0.11	±0.62	FS ²	
Average			0.6	0.13			0.82	0.14				0.02	0.02	0.14	0.55		
Playa 1									1.30 ⁴								
P1-SS-01	0.73	±0.13	FS ²		0.43	±0.09	FS ²			0.02	±0.03	FS ²		NS ³		NS ³	
P2-SS-02	1.44	±0.20	FS ²		0.76	±0.13	FS ²			0.02	±0.03	FS ²		NS ³		NS ³	
Average	1.09	±0.17			0.595	0.11				0.02	±0.03						
Playa 2									0.59 ⁴								
P2-SS-01	0.28	±0.08	FS ²		0.27	±0.07	FS ²			0.05	±0.04	FS ²		NS ³		NS ³	
Playa 3									0.86 ⁴								
P3-SS-01	0.49	±0.10	FS ²		0.39	±0.09	FS ²			0.03	±0.03	FS ²		0.05	±0.57	FS ²	
P3-SS-02	0.49	±0.10	FS ²		0.46	±0.09	FS ²			0.04	±0.04	FS ²		0.12	±0.62	FS ²	
Average	0.49	±0.10			0.43	±0.09				0.04	±0.04			0.09	±0.60		
Offsite Averaged	0.25	±0.07	0.61 ⁶	±0.12 ⁶	0.21	±0.07	0.64 ⁶	±0.12 ⁶	1.22	0.02	±0.03	0.01 ⁶	±0.02 ⁶	NS ³		NS ³	
Bushland									1.07								
OS-SS-32	0.35	±0.08	0.58	±0.11	0.33	±0.08	0.74	±0.11		0.02	±0.03	0.01	±0.02	0.16	±0.90	FS ²	
PB-SS-01	0.32	±0.07	FS ²		0.34	±0.07	FS ²			0.03	±0.03	FS ²		0.10	±1.04	FS ²	

¹(±): Counting error at 95% confidence level.²FS = first year sampled.³NS = no sample collected.⁴Ratios were not provided in the 1994 *Environmental Report for Pantex Plant* (DOE 1995b). The most conservative ratio was calculated using 1994 sample averages.⁵Historical averages were calculated using routine surveillance data from 1988–1993 provided in the 1994 *Environmental Report for Pantex Plant*. (DOE 1995b)⁶Averages were not provided in the 1994 *Environmental Report for Pantex Plant* (DOE 1995b) and were calculated.

Source: DOE 1995b:12-8 through 12-14