

Appendix A. Errata

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The following table is a corrected version of Table 4.1 in the *Oak Ridge Reservation Annual Site Environmental Report for 2003*, DOE/ORO/2185.

Table 4.1. ETP radionuclide air emission totals, 2003 (Ci)^a

Radionuclide	Total major	TSCAI (major) ^b	Total minor	Total ETP
²²⁸ Ac	-	-	1.03E-08	1.03E-08
²⁴¹ Am	-	-	3.31E-08	3.31E-08
²⁴³ Am	-	-	2.40E-10	2.41E-10
²¹² Bi	-	-	7.34E-09	7.34E-09
²¹⁴ Bi	-	-	8.07E-09	8.07E-09
¹⁴ C	1.52E-05	1.52E-05	1.10E-05	2.62E-04
¹³⁷ Cs	1.15E-04	1.15E-04	5.09E-06	1.20E-04
⁵⁷ Co	-	-	2.20E-09	2.20E-09
⁶⁰ Co	-	-	2.66E-07	2.66E-07
²⁴⁴ Cm	-	-	7.34E-10	7.34E-10
¹⁵² Eu	-	-	7.34E-10	7.34E-10
¹⁵⁴ Eu	-	-	4.25E-07	4.25E-07
¹³¹ I	-	-	5.21E-08	5.21E-08
⁸⁵ Kr	1.41E-03	1.41E-03	1.48E-06	1.41E-03
²¹⁰ Pb	-	-	6.51E-08	6.51E-08
²¹² Pb	-	-	7.34E-09	7.34E-09
²¹⁴ Pb	-	-	6.63E-09	6.63E-09
²³⁷ Np	3.98E-07	3.98E-07	1.56E-07	5.53E-07
⁹⁵ Nb	-	-	7.34E-10	7.34E-10
²³⁸ Pu	2.75E-07	2.75E-07	6.60E-08	3.41E-07
²³⁹ Pu	3.28E-07	3.28E-07	1.06E-07	4.33E-07
²⁴² Pu	-	-	2.23E-09	2.23E-09
⁴⁰ K	-	-	2.71E-07	2.71E-07
²³¹ Pa	-	-	3.57E-10	3.57E-10
²³³ Pa	-	-	5.14E-09	5.14E-09
²³⁴ Pa	-	-	1.31E-07	1.31E-07
^{234m} Pa	7.18E-03	7.18E-03	3.71E-05	7.22E-03
²²⁶ Ra	-	-	2.53E-07	2.53E-07
²²⁸ Ra	-	-	7.34E-10	7.34E-10
⁸⁹ Sr	2.94E-06	2.94E-06	-	2.94E-06
⁹⁰ Sr	-	-	1.08E-06	1.08E-06
⁹⁹ Tc	9.44E-04	9.44E-04	2.73E-05	9.71E-04
²⁰⁸ Tl	-	-	2.94E-09	2.94E-09
²²⁸ Th	8.31E-06	8.31E-06	4.85E-08	8.36E-06
²³⁰ Th	6.44E-05	6.44E-05	9.07E-08	6.45E-05
²³¹ Th	-	-	1.47E-09	1.47E-09
²³² Th	3.45E-05	3.45E-05	5.32E-08	3.45E-05
²³⁴ Th	3.23E-03	3.23E-03	2.63E-05	3.26E-03

Table 4.1. (continued)

Radionuclide	Total major	TSCAI (major) ^b	Total minor	Total ETTP
³ H	7.35E+00	7.35E+00	1.34E-02	7.37E+00
²³³ U	-	-	3.35E-06	3.35E-06
²³⁴ U	1.94E-04	1.94E-04	3.79E-05	2.32E-04
²³⁵ U	8.27E-04	8.27E-04	2.22E-06	8.29E-04
²³⁶ U	-	-	5.18E-07	5.18E-07
²³⁸ U	3.30E-04	3.28E-04	2.73E-05	3.67E-04
Totals	7.37E+00	7.37E+00	1.36E-02	7.38E-00

^a1 Ci = 3.7E+10 Bq

^bToxic Substances Control Act Incinerator

The following corrections pertain to the *Oak Ridge Reservation Annual Site Environmental Report for 2004*, DOE/ORO/2204.

On p. 5-33, in the right-hand column, the sentence that begins fourteen lines from the bottom should read as follows.

Statistically significant downward trends are observed (at a significance level of 0.01) for tritium in Well 1190 as well as for gross beta, total radioactive strontium, and tritium in Well 1191.

On p. 5-35, in the right-hand column, the reference citation beginning seven lines from the bottom should read as follows.

Annual Monitoring Plan for the High Flux Isotope Reactor Site—Monitoring Period 2003–2004 (Bonine 2003).

On p. 7-14, Sect. 7.8.2, second paragraph, the first sentence should read as follows.

Since 1997, 381 turkeys have been harvested. Of these, only two (0.5%) have been retained due to potential radiological contamination.

Page 8-16. Table 8.7 should read as follows.

Table 8.7. Summary of maximum potential radiation dose equivalents to an adult during 2004 and locations of the maximum exposures

Pathway	Dose to maximally exposed individual		Percentage of DOE mrem/year limit (%)	Estimated population dose		Population within 80 km	Estimated background radiation population dose (person-rem) ^a
	mrem	mSv		person-rem	person-Sv		
Airborne effluents:							
All pathways	0.4	0.004	0.4	10.4	0.104	1,040,041 ^b	
Liquid effluents:							
Drinking water	0.2	0.002	0.2	3.7	0.037	346,692 ^c	
Eating fish	0.3	0.003	0.3	0.7	0.007	37,739 ^d	
Other activities	0.01	0.0001	0.01	0.3	0.003	771,146 ^d	
Eating deer	4.6	0.046 ^e	4.6	0.2	0.002	332	
Eating geese	0.08	0.0008 ^f	0.08	g	g		
Eating turkey	0.1	0.001 ^h	0.01	0.0008	8E-6	37	
Direct radiation	6	0.06 ⁱ	6	0.6	0.006	100	
All pathways	12	0.12	12	16	0.16	1,040,041	312,012

^aEstimated background population dose is based on 300 mrem/year individual dose and the population within 80 km of the ORR.

^bPopulation based on 2000 census data.

^cPopulation estimates based on community and non-community drinking water supply data from TDEC, Division of Water.

^dPopulation estimates based on the number of fish harvested in Melton Hill, Watts Bar, and Chickamauga Reservoirs.

^eThe maximum EDE from consumption of a deer harvested on the ORR in 2004 and the population dose is based on number of hunters that harvested deer.

^fFrom consuming two hypothetical worst-case geese, each a combination of the heaviest goose harvested and the highest measured concentrations of ¹³⁷Cs in released geese.

^gPopulation doses were not estimated for the consumption of geese since there are no goose hunts on the ORR.

^hFrom consuming two hypothetical worst-case turkey, each a combination of the heaviest turkey harvested and the highest measured concentrations of ¹³⁷Cs in released turkey.

ⁱDirect radiation dose estimate based on exposure to a fisherman on Poplar Creek.

Page 8-16. The last paragraph of Sect. 8.1.4 should read as follows.

The total collective EDE to the population living within a 50-mile (80-km) radius of the ORR was estimated to be less than 16 person-rem (0.16 person-Sv). This dose is about 0.005 % of the 312,012 person-rem (3123 person-Sv) that this population received from natural sources during 2004.

