Errata page for U.S. Department of Energy
Portsmouth Gaseous Diffusion Plant
Annual Site Environmental Report 2017
(DOE/PPPO/03-0862&D1,
FBP-ER-RCRA-WD-RPT-0288, Revision 3)

During an evaluation of radiological dose, it was discovered that an error was made in the calculation of dose at the ambient air monitoring stations involving the misapplication of the conversion factor converting concentration to dose. The following corrections to the report referenced above have been made to respond to this error.

Page	**Correction**
ES-4	First paragraph, third sentence. "The highest net dose calculation for the ambient air monitoring stations (0.072 mrem/year) was at station A41A, which is northeast of the plant at Zahns Corner."
4-6	Section 4.3.4, third paragraph, last sentence. Corrected the ambient air dose as follows: "The net dose at each station ranged from 0 at stations with a lower dose than the background station to 0.072 mrem/year at station A41A, which is northeast of the plant at Zahns Corner (see Figure 4.1)."
4-6	Section 4.3.4, fourth paragraph. Revised the paragraph as follows: "The highest net dose at the ambient air monitoring stations (0.072 mrem/year at station A41A) is less than the 10 mrem/year NESHAP limit for airborne radiological releases (40 CFR Part 61, Subpart H) and 100 mrem/year DOE limit in DOE Order 458.1 for all radiological releases from a facility."
4-18	Paragraph before Section 4.6.2, second sentence. Corrected the ambient air dose as follows: "The highest net dose calculation for the off-site ambient air monitoring stations (0.072 mrem/year) was at station A41A, which is northeast of the plant at Zahns Corner."

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Errata page for U.S. Department of Energy
Portsmouth Gaseous Diffusion Plant
Annual Site Environmental Data 2017
(DOE/PPPO/03-0863&D1,
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During an evaluation of radiological dose, it was discovered that an error was made in the calculation of dose at the ambient air monitoring stations involving the misapplication of the conversion factor converting concentration to dose. The following corrections to the report referenced above have been made to respond to this error.

Page	**Correction**
3-2	Table 3.3. Dose calculations for ambient air monitoring stations – 2017. A replacement for Table 3.3 (pages 3-2 through 3-5) is provided following this Errata page.

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Table 3.2. Predicted radiation doses from airborne releases at PORTS – 2017

Effective dose to:	
Maximally exposed individual (mrem/year)	0.12
Population[a] (person-rem/year)	0.47

[a]Population within 50 miles (80 kilometers) of plant site.

Table 3.3. Dose calculations for ambient air monitoring stations – 2017

Station	Parameter[a]	Dose[b] (mrem/year)	Total dose for station[c]	Net dose for station[d]
A3	Americium-241	2.4E-03		
	Neptunium-237	2.8E-04		
	Plutonium-238	0		
	Plutonium-239/240	2.3E-03		
	Technetium-99	5.6E-02		
	Uranium-233/234	2.8E-03		
	Uranium-235/236	1.4E-04	(0.064)	(0.026)
	Uranium-238	8.1E-04	6.4E-02	2.6E-02
A6	Americium-241	1.9E-03		
	Neptunium-237	2.6E-04		
	Plutonium-238	6.3E-04		
	Plutonium-239/240	1.6E-03		
	Technetium-99	3.5E-02		
	Uranium-233/234	2.5E-03		
	Uranium-235/236	1.9E-04	(0.043)	(0.005)
	Uranium-238	1.1E-03	4.3E-02	5.0E-03
A8	Americium-241	1.6E-03		
	Neptunium-237	5.5E-04		
	Plutonium-238	6.2E-04		
	Plutonium-239/240	1.0E-03		
	Technetium-99	3.8E-02		
	Uranium-233/234	2.6E-03		
	Uranium-235/236	2.0E-04	(0.045)	(0.007)
	Uranium-238	7.8E-04	4.5E-02	7.0E-03
A9	Americium-241	1.2E-03		
	Neptunium-237	1.5E-04		
	Plutonium-238	1.3E-03		
	Plutonium-239/240	2.1E-03		
	Technetium-99	3.3E-02		
	Uranium-233/234	2.9E-03		
	Uranium-235/236	1.7E-04	(0.043)	(0.005)
	Uranium-238	2.1E-03	4.3E-02	5.0E-03

Table 3.3. Dose calculations for ambient air monitoring stations – 2017 (continued)

Station	Parameter[a]	Dose[b] (mrem/year)	Total dose for station[c]	Net dose for station[d]
A10	Americium-241	2.0E-03		
	Neptunium-237	6.7E-04		
	Plutonium-238	1.5E-03		
	Plutonium-239/240	1.5E-03		
	Technetium-99	2.4E-02		
	Uranium-233/234	2.8E-03		
	Uranium-235/236	2.3E-04	(0.034)	
	Uranium-238	1.1E-03	3.4E-02	0
A12	Americium-241	1.2E-03		
	Neptunium-237	0.0E+00		
	Plutonium-238	3.4E-04		
	Plutonium-239/240	1.9E-03		
	Technetium-99	2.0E-02		
	Uranium-233/234	3.8E-03		
	Uranium-235/236	1.9E-04	(0.028)	
	Uranium-238	9.2E-04	2.8E-02	0
A15	Americium-241	1.7E-03		
	Neptunium-237	1.5E-04		
	Plutonium-238	9.6E-04		
	Plutonium-239/240	1.4E-03		
	Technetium-99	3.2E-02		
	Uranium-233/234	1.1E-03		
	Uranium-235/236	1.4E-04	(0.038)	
	Uranium-238	7.9E-04	3.8E-02	0
A23	Americium-241	2.3E-03		
	Neptunium-237	4.5E-04		
	Plutonium-238	1.3E-03		
	Plutonium-239/240	2.5E-03		
	Technetium-99	2.9E-02		
	Uranium-233/234	3.6E-03		
	Uranium-235/236	1.5E-04	(0.041)	(0.003)
	Uranium-238	2.3E-03	4.1E-02	3.0E-03
A24	Americium-241	2.0E-03		
	Neptunium-237	5.5E-04		
	Plutonium-238	9.6E-04		
	Plutonium-239/240	1.6E-03		
	Technetium-99	2.5E-02		
	Uranium-233/234	3.7E-03		
	Uranium-235/236	1.7E-04	(0.036)	
	Uranium-238	2.0E-03	3.6E-02	0

Table 3.3. Dose calculations for ambient air monitoring stations – 2017 (continued)

Station	Parameter[a]	Dose[b] (mrem/year)	Total dose for station[c]	Net dose for station[d]
A28	Americium-241	3.5E-03		
	Neptunium-237	9.4E-03		
	Plutonium-238	1.1E-03		
	Plutonium-239/240	1.8E-03		
	Technetium-99	1.8E-02		
	Uranium-233/234	9.4E-04		
	Uranium-235/236	1.2E-04	(0.036)	
	Uranium-238	8.4E-04	3.6E-02	0
A29	Americium-241	2.7E-03		
	Neptunium-237	2.9E-04		
	Plutonium-238	9.1E-04		
	Plutonium-239/240	2.3E-03		
	Technetium-99	2.1E-02		
	Uranium-233/234	1.5E-03		
	Uranium-235/236	1.3E-04	(0.029)	
	Uranium-238	8.9E-04	2.9E-02	0
A36	Americium-241	2.0E-03		
	Neptunium-237	5.5E-04		
	Plutonium-238	2.2E-03		
	Plutonium-239/240	1.7E-03		
	Technetium-99	7.5E-02		
	Uranium-233/234	1.4E-02		
	Uranium-235/236	3.2E-04	(0.10)	(0.062)
	Uranium-238	8.0E-03	1.0E-01	6.2E-02
A37	Americium-241	3.1E-03		
	Neptunium-237	4.5E-04		
	Plutonium-238	5.6E-04		
	Plutonium-239/240	1.8E-03		
	Technetium-99	3.1E-02		
	Uranium-233/234	9.1E-04		
	Uranium-235/236	1.3E-04	(0.038)	
	Uranium-238	8.8E-04	3.8E-02	-
A41A	Americium-241	2.0E-03		
	Neptunium-237	6.5E-02		
	Plutonium-238	1.3E-03		
	Plutonium-239/240	2.4E-03		
	Technetium-99	3.5E-02		
	Uranium-233/234	3.0E-03		
	Uranium-235/236	1.7E-04	(0.11)	(0.072)
	Uranium-238	1.9E-03	1.1E-01	7.2E-02

Table 3.3. Dose calculations for ambient air monitoring stations – 2017 (continued)

Station	Parameter[a]	Dose[b] (mrem/year)	Total dose for station[c]	Net dose for station[d]
T7	Americium-241	1.6E-03		
	Neptunium-237	3.0E-04		
	Plutonium-238	9.1E-04		
	Plutonium-239/240	2.0E-03		
	Technetium-99	1.7E-02		
	Uranium-233/234	3.2E-03		
	Uranium-235/236	1.8E-04	(0.026)	
	Uranium-238	9.1E-04	2.6E-02	0

[a]Parameters listed in **bold** type were detected at least once in the samples collected in 2017 (see Table 2.9).
[b]The dose calculation is based on the maximum detection of each parameter at each station. For parameters that were not detected, half of the highest undetected result for the parameter was used to calculate the activity of each parameter in ambient air that is the basis for the dose. Measurements are provided in scientific notation. The number and sign (+ or -) to the right of the "E" indicate the number of places to the right or left of the decimal point. For example, 3.4E-04 is 0.00034 (the decimal point moves four places to the left); 2.1E+02 is 210 (the decimal point moves two places to the right).
[c]The total dose is provided in scientific notation and standard numeric format (in parentheses).
[d]The net dose is calculated by subtracting the total dose at Station A37 (background) from the total dose calculated for each station (the net dose is recorded as zero for stations with a gross dose less than the background station). The net dose is provided in scientific notation and standard numeric format (in parentheses).