

Appendix C - 2

Summary of Air Monitoring Data



Ambient Air and Atmospheric Fallout Samples Are Collected from Numerous Locations in the West Valley Area

Table C - 2.1

**1995 Airborne Radioactive Effluent Totals (curies)
from the Main Ventilation Stack (ANSTACK)**

Month	Alpha	Beta	H-3
<i>January</i>	1.17±0.27E-07	2.18±0.09E-06	1.69±0.04E-03
<i>February</i>	8.13±2.21E-08	1.70±0.08E-06	5.87±0.21E-04
<i>March</i>	4.06±1.92E-08	1.78±0.08E-06	5.91±0.09E-03
<i>April</i>	3.16±2.01E-08	1.02±0.07E-06	3.71±0.06E-03
<i>May</i>	6.96±2.46E-08	3.12±0.12E-06	3.57±0.06E-03
<i>June</i>	4.76±2.53E-08	7.82±0.76E-07	2.65±0.05E-03
<i>July</i>	9.62±2.52E-08	1.19±0.08E-06	3.61±0.07E-03
<i>August</i>	4.37±2.39E-08	3.90±0.13E-06	3.63±0.07E-03
<i>September</i>	4.79±0.55E-07	1.67±0.01E-04	3.86±0.06E-03
<i>October</i>	7.56±0.63E-07	8.74±0.06E-05	4.12±0.07E-03
<i>November</i>	1.76±1.91E-08	2.61±0.03E-05	1.36±0.03E-03
<i>December</i>	3.22±2.89E-08	2.56±0.03E-05	1.06±0.02E-03
Annual Total	1.77±0.12E-06	3.15±0.01E-04	3.58±0.02E-02

Isotope	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual Total
<i>Co-60</i>	0.24±3.08E-08	2.97±4.20E-08	2.08±3.78E-08	4.55±5.00E-08	9.84±8.15E-08
<i>Sr-90</i>	5.95±0.44E-07	1.02±0.07E-06	5.74±0.04E-05	1.46±0.02E-05	7.36±0.05E-05
<i>I-129</i>	3.70±0.68E-06	5.96±0.90E-06	9.39±1.28E-07	9.96±5.86E-08	1.07±0.11E-05
<i>Cs-134</i>	0.61±3.00E-08	-0.70±4.80E-08	3.38±6.61E-08	5.10±8.72E-08	0.84±1.23E-07
<i>Cs-137</i>	2.26±0.12E-06	1.82±0.17E-06	5.82±0.05E-05	8.21±0.08E-05	1.44±0.01E-04
<i>Eu-154</i>	-0.74±2.44E-07	0.22±3.72E-07	2.17±3.57E-07	0.38±3.11E-07	2.03±6.50E-07
<i>U-232</i>	3.57±0.31E-08	0.00±9.99E-09	0.00±2.27E-09	2.83±1.84E-08	6.40±2.13E-08
<i>U-233/234</i>	1.09±0.46E-08	1.46±0.71E-08	1.73±0.40E-08	1.80±0.41E-08	6.08±1.02E-08
<i>U-235/236</i>	4.76±9.53E-10	-2.41±2.44E-09	1.21±0.99E-09	3.31±1.72E-09	2.59±3.29E-09
<i>U-238</i>	9.00±4.42E-09	1.26±0.60E-08	1.18±0.32E-08	2.06±0.45E-08	5.40±0.93E-08
<i>Pu-238</i>	3.43±0.97E-08	4.00±2.07E-08	6.56±0.80E-08	8.01±0.88E-08	2.20±0.26E-07
<i>Pu-239/240</i>	6.55±1.26E-08	3.14±1.36E-08	8.88±0.98E-08	9.32±0.98E-08	2.79±0.23E-07
<i>Am-241</i>	9.76±1.84E-08	6.90±1.80E-08	2.41±0.24E-07	6.14±0.46E-07	1.02±0.06E-06
<i>Total U(g)</i>	1.60±0.02E-02	3.79±0.05E-02	3.83±0.10E-02	2.58±0.07E-02	1.18±0.01E-01

Table C - 2.2

Comparison of 1995 Main Stack Exhaust Radioactivity Concentrations with Department of Energy Guidelines

Isotope	Half Life (years)	Total Curies Released^a (Ci)	Radioactivity (Becquerels)	Average Concentration (μCi/mL)	DCG (μCi/mL)	% of DCG
<i>Alpha</i>	N/A	1.77 \pm 0.12E-06	6.55 \pm 0.44E+04	2.37 \pm 0.16E-15	N/A ^b	N/A
<i>Beta</i>	N/A	3.15 \pm 0.01E-04	1.16 \pm 0.01E+07	4.22 \pm 0.02E-13	N/A ^b	N/A
<i>H-3</i>	12.35	3.58 \pm 0.02E-02	1.32 \pm 0.01E+09	4.80 \pm 0.03E-11	1.00E-07	0.0
<i>Co-60</i>	5.27	9.84 \pm 8.15E-08	3.64 \pm 3.02E+03	1.32 \pm 1.09E-16	8.00E-11	0.0
<i>Sr-90</i>	29.124	7.36 \pm 0.05E-05	2.72 \pm 0.02E+06	9.88 \pm 0.06E-14	9.00E-12	1.1
<i>I-129</i>	1.57E+07	1.07 \pm 0.11E-05	3.96 \pm 0.42E+05	1.44 \pm 0.15E-14	7.00E-11	0.0
<i>Cs-134</i>	2.06	0.84 \pm 1.23E-07	3.10 \pm 4.56E+03	1.13 \pm 1.65E-16	2.00E-10	< 0.0
<i>Cs-137</i>	30	1.44 \pm 0.01E-04	5.34 \pm 0.04E+06	1.94 \pm 0.01E-13	4.00E-10	0.0
<i>Eu-154</i>	8.8	2.03 \pm 6.50E-07	0.75 \pm 2.40E+04	2.72 \pm 8.72E-16	5.00E-11	< 0.0
<i>U-232^c</i>	72	6.40 \pm 2.13E-08	2.37 \pm 0.79E+03	8.59 \pm 2.86E-17	2.00E-14	0.4
<i>U-233/234^c</i>	2.45E+05	6.08 \pm 1.02E-08	2.25 \pm 0.38E+03	8.16 \pm 1.37E-17	9.00E-14	0.1
<i>U-235/236^c</i>	7.04E+08	2.59 \pm 3.29E-09	0.96 \pm 1.22E+02	3.47 \pm 4.41E-18	1.00E-13	< 0.0
<i>U-238^c</i>	4.47E+09	5.40 \pm 0.93E-08	2.00 \pm 0.34E+03	7.25 \pm 1.24E-17	1.00E-13	0.1
<i>Pu-238</i>	87.07	2.20 \pm 0.26E-07	8.14 \pm 0.95E+03	2.95 \pm 0.35E-16	3.00E-14	1.0
<i>Pu-239/240</i>	2.41E+04	2.79 \pm 0.23E-07	1.03 \pm 0.09E+04	3.74 \pm 0.31E-16	2.00E-14	1.9
<i>Am-241</i>	432	1.02 \pm 0.06E-06	3.78 \pm 0.21E+04	1.37 \pm 0.08E-15	2.00E-14	6.9
Total % of DCGs^d						11.5

^a Total volume released at 50,000 cfm = 7.44E+14 mL/yr.

^b Derived concentration guides (DCGs) are not specified for gross alpha and gross beta activity.

^c Total uranium = 1.18 \pm 0.01E-01 g; average = 1.58 \pm 0.01E-10 μ g/mL.

^d Total percent DCGs for applicable measured radionuclides.

N/A - Not applicable.

DCGs are listed for reference only. They are applicable to average concentrations at the site boundary but not to stack concentrations, as might be inferred from their inclusion in this table.

Table C - 2.3

**1995 Airborne Radioactive Effluent Concentrations ($\mu\text{Ci}/\text{mL}$) from the
Vitrification System Ventilation Stack (ANVITSK)**

Month	Alpha	Beta			
<i>December 1995</i>	1.57 \pm 4.40E-15	3.92 \pm 1.20E-14			
	Co-60	Sr-90	Cs-134	Cs-137	Eu-154
4th Qtr	5.14 \pm 4.02E-16	5.37 \pm 1.67E-16	-2.11 \pm 4.35E-16	-2.11 \pm 3.89E-16	3.56 \pm 9.89E-16
	U-232	U-233/234	U-235/236	U-238	Total U ($\mu\text{g}/\text{mL}$)
4th Qtr	2.56 \pm 0.90E-16	4.51 \pm 3.19E-17	1.94 \pm 1.65E-17	4.44 \pm 2.58E-17	1.66 \pm 0.08E-11
	Pu-238	Pu-239/240	Am-241		
4th Qtr	1.66 \pm 2.33E-17	0.73 \pm 1.04E-17	3.14 \pm 2.33E-17		

Table C - 2.4

**1995 Airborne Radioactive Effluent Concentrations ($\mu\text{Ci}/\text{mL}$) from the
Seismic Sampler (ANSEISK)**

Month	Alpha	Beta
<i>December 1995</i>	0.32 \pm 6.67E-16	5.35 \pm 1.82E-15

Note: These results represent baseline, nonradioactive operations. Quarterly data are for December 1995 only. Data represent two sampling points from the same stack. (See Chapter 2, Environmental Monitoring.) ANSEISK provides back-up samples for the primary vitrification sampler (ANVITSK).

Table C - 2.5

**1995 Airborne Radioactive Effluent Totals (curies) from the
Cement Solidification System Ventilation Stack (ANCSSTK)**

Month	Alpha	Beta
<i>January</i>	-0.02±4.90E-09	-1.54±1.24E-08
<i>February</i>	0.36±3.62E-09	-0.68±1.08E-08
<i>March</i>	-1.59±4.72E-09	-0.40±1.06E-08
<i>April</i>	3.72±5.64E-09	0.86±1.24E-08
<i>May</i>	-0.04±4.61E-09	-1.58±1.18E-08
<i>June</i>	1.08±3.38E-09	-1.29±0.81E-08
<i>July</i>	1.11±3.11E-09	-1.23±0.77E-08
<i>August</i>	-3.13±3.23E-09	0.33±7.60E-09
<i>September</i>	1.34±3.04E-09	-7.63±7.94E-09
<i>October</i>	2.77±2.78E-09	-1.20±0.74E-08
<i>November</i>	3.11±3.86E-09	-1.32±0.97E-08
<i>December</i>	-4.16±4.03E-09	-1.08±0.97E-08
Annual Total	0.46±1.36E-08	-1.02±0.34E-07

Isotope	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual Total
<i>Co-60</i>	-2.23±9.12E-09	-0.21±1.14E-08	0.95±1.11E-08	7.74±7.40E-09	1.29±1.98E-08
<i>Sr-90</i>	-1.13±0.60E-08	8.77±4.15E-09	-1.72±5.22E-09	1.66±0.47E-08	1.24±1.01E-08
<i>I-129</i>	1.62±0.63E-08	6.25±1.93E-08	0.99±1.04E-08	-1.76±5.68E-09	8.68±2.35E-08
<i>Cs-134</i>	-0.17±1.13E-08	0.00±1.06E-08	-1.08±1.17E-08	-3.23±7.35E-09	-1.57±2.08E-08
<i>Cs-137</i>	0.89±1.01E-08	0.19±1.16E-08	-1.15±1.10E-08	4.77±8.23E-09	0.41±2.06E-08
<i>Eu-154</i>	-0.60±9.46E-08	-0.55±1.24E-07	4.03±9.58E-08	1.54±2.16E-08	-0.05±1.84E-07
<i>U-232</i>	2.32±0.24E-09	0.00±2.37E-09	1.28±0.15E-09	2.99±1.17E-09	6.59±2.66E-09
<i>U-233/234</i>	2.48±1.51E-09	2.25±1.26E-09	4.62±1.27E-09	2.66±0.72E-09	1.20±0.25E-08
<i>U-235/236</i>	-4.51±6.39E-10	2.63±1.66E-09	5.05±4.15E-10	4.30±3.10E-10	3.11±1.85E-09
<i>U-238</i>	1.36±1.27E-09	4.51±1.93E-09	0.51±1.13E-09	3.39±0.77E-09	9.77±2.68E-09
<i>Pu-238</i>	6.08±7.31E-10	4.87±6.07E-10	2.87±1.06E-09	-1.01±2.30E-10	3.86±1.44E-09
<i>Pu-239/240</i>	6.00±6.02E-10	6.07±4.80E-10	6.27±5.47E-10	1.64±1.65E-10	2.00±0.96E-09
<i>Am-241</i>	1.55±1.04E-09	3.89±0.34E-07	0.87±1.12E-09	4.95±3.38E-10	3.92±0.34E-07
<i>Total U (g)</i>	6.84±0.08E-03	8.33±0.12E-03	6.82±0.32E-03	6.42±0.13E-03	2.84±0.04E-02

Table C - 2.6

1995 Airborne Radioactive Effluent Totals (curies) from the Contact Size-Reduction Facility Ventilation Stack (ANCSRFK)

Month	Alpha		Beta	
<i>January</i>	-1.66±2.52E-10		7.86±7.47E-10	
<i>February</i>	1.19±1.77E-10		1.94±0.55E-09	
<i>March</i>	2.53±7.21E-11		5.13±1.78E-10	
<i>April</i>	0.50±1.05E-10		1.07±0.28E-09	
<i>May</i>	4.16±9.16E-11		5.59±2.83E-10	
<i>June</i>	1.14±2.92E-10		2.06±0.71E-09	
<i>July</i>	-0.43±2.50E-10		3.62±0.82E-09	
<i>August</i>	-4.36±3.44E-10		4.47±1.00E-09	
<i>September</i>	4.71±4.48E-10		4.74±1.42E-09	
<i>October</i>	0.92±2.45E-10		1.85±0.87E-09	
<i>November</i>	1.51±1.63E-10		7.93±4.76E-10	
<i>December</i>	-1.20±2.20E-10		1.94±0.64E-09	
Annual Total	2.99±8.49E-10		2.43±0.26E-08	

Isotope	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual Total
<i>Co-60</i>	0.29±2.73E-10	6.91±4.84E-10	-1.13±2.86E-10	-3.31±4.06E-10	2.76±7.45E-10
<i>Sr-90</i>	-1.22±1.29E-10	1.97±0.27E-09	-5.30±2.97E-10	4.01±1.70E-10	1.72±0.46E-09
<i>I-129</i>	1.38±0.37E-08	6.75±1.96E-09	2.69±1.15E-09	0.00±4.59E-10	2.32±0.44E-08
<i>Cs-134</i>	2.14±5.12E-10	2.36±2.09E-10	-1.70±9.44E-10	4.39±3.48E-10	0.72±1.15E-09
<i>Cs-137</i>	1.48±2.69E-10	0.80±2.94E-10	1.20±2.53E-10	-0.69±3.89E-10	2.79±6.12E-10
<i>Eu-154</i>	-1.63±2.58E-09	0.06±3.04E-09	-3.47±6.10E-09	0.43±1.05E-09	-4.61±7.36E-09
<i>U-232</i>	1.89±0.18E-11	0.00±5.19E-11	3.88±0.40E-11	2.54±0.82E-10	3.12±0.97E-10
<i>U-233/234</i>	1.11±0.50E-10	9.92±5.21E-11	1.74±0.48E-10	1.17±0.33E-10	5.01±0.93E-10
<i>U-235/236</i>	1.85±2.27E-11	0.55±1.10E-11	0.00±8.55E-12	1.45±1.32E-11	3.85±2.97E-11
<i>U-238</i>	6.47±3.51E-11	8.82±4.94E-11	1.25±0.40E-10	1.09±0.31E-10	3.87±0.79E-10
<i>Pu-238</i>	3.02±2.47E-11	3.61±8.80E-11	-0.48±5.50E-11	0.37±1.65E-11	0.65±1.08E-10
<i>Pu-239/240</i>	0.00±1.50E-11	0.85±3.48E-11	0.42±1.80E-11	1.39±0.93E-11	2.66±4.30E-11
<i>Am-241</i>	2.07±2.07E-11	1.25±0.65E-10	0.98±5.06E-11	0.80±2.04E-11	1.64±0.87E-10
<i>Total U (g)</i>	2.54±0.03E-04	1.84±0.03E-04	3.59±0.10E-04	1.56±0.03E-04	9.54±0.12E-04

Table C - 2.7

1995 Airborne Radioactive Effluent Totals (curies) from the Supernatant Treatment System Ventilation Stack (ANSTSTK)

Month	Alpha	Beta	H-3
<i>January</i>	0.30±2.07E-09	-2.61±5.26E-09	<i>Dry</i>
<i>February</i>	0.77±1.61E-09	1.59±4.67E-09	<i>Dry</i>
<i>March</i>	0.00±1.98E-09	4.98±4.57E-09	<i>Dry</i>
<i>April</i>	-0.14±2.01E-09	6.71±5.01E-09	<i>Dry</i>
<i>May</i>	0.47±1.87E-09	-3.08±4.73E-09	6.56±0.82E-05
<i>June</i>	0.96±1.88E-09	-3.50±4.39E-09	6.18±0.47E-05
<i>July</i>	1.61±1.90E-09	0.31±4.71E-09	1.89±0.21E-05
<i>August</i>	-0.56±2.06E-09	6.27±0.68E-08	3.70±0.74E-05
<i>September</i>	2.32±2.11E-09	3.00±0.64E-08	2.95±0.47E-05
<i>October</i>	0.44±1.54E-09	-4.17±4.82E-09	7.35±0.60E-05
<i>November</i>	-1.61±1.36E-09	-9.63±4.45E-09	1.98±0.19E-05
<i>December</i>	-2.26±1.91E-09	-7.17±4.57E-09	1.67±0.57E-05
Annual Total	2.29±6.48E-09	7.61±1.76E-08	3.23±0.49E-04

Isotope	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual Total
<i>Co-60</i>	0.23±3.01E-09	1.67±5.81E-09	-0.29±4.27E-09	-2.18±3.75E-09	-0.57±8.67E-09
<i>Sr-90</i>	-0.48±1.96E-09	-5.01±2.06E-09	0.52±1.60E-09	5.31±2.11E-09	0.34±3.89E-09
<i>I-129</i>	5.05±0.77E-07	3.84±0.75E-07	1.25±0.16E-07	1.22±0.21E-07	1.14±0.11E-06
<i>Cs-134</i>	0.21±3.01E-09	4.10±5.31E-09	1.10±4.27E-09	-2.64±4.31E-09	2.77±8.61E-09
<i>Cs-137</i>	-1.46±3.15E-09	-1.31±4.46E-09	9.42±1.13E-08	3.72±4.36E-09	9.52±1.33E-08
<i>Eu-154</i>	-0.85±2.85E-08	-1.19±4.40E-08	2.53±2.46E-08	0.89±1.07E-08	1.38±5.89E-08
<i>U-232</i>	3.56±0.34E-11	0.00±7.60E-10	2.70±0.28E-10	1.24±0.51E-09	1.55±0.92E-09
<i>U-233/234</i>	1.10±0.20E-08	1.88±0.74E-09	1.84±0.44E-09	2.90±0.52E-09	1.76±0.22E-08
<i>U-235/236</i>	0.60±3.37E-10	0.00±1.89E-10	0.76±1.12E-10	2.44±1.41E-10	3.80±3.82E-10
<i>U-238</i>	1.24±0.61E-09	1.75±0.79E-09	1.08±0.34E-09	2.34±0.46E-09	6.41±1.15E-09
<i>Pu-238</i>	4.68±0.50E-08	-0.42±1.16E-09	3.74±2.51E-10	0.65±1.59E-10	4.68±0.51E-08
<i>Pu-239/240</i>	1.93±2.23E-10	3.72±6.33E-10	1.23±0.47E-09	4.90±7.93E-11	1.84±0.82E-09
<i>Am-241</i>	1.57±0.88E-09	5.40±6.52E-10	0.45±1.88E-10	3.21±2.21E-10	2.48±1.13E-09
<i>Total U (g)</i>	2.28±0.03E-03	2.96±0.05E-03	2.24±0.06E-03	4.81±0.07E-03	1.23±0.01E-02

NA - Not available.

Table C - 2.8

1995 Airborne Radioactive Effluent Totals (curies) from the Supercompactor Ventilation Stack (ANSUPCV)

Month	Alpha	Beta
<i>January</i>	-0.28±2.21E-10	-0.29±5.80E-10
<i>February</i>	1.69±1.57E-10	2.61±0.56E-09
<i>March</i>	0.77±1.81E-10	8.59±4.05E-10
<i>April</i>	N/A	N/A
<i>May</i>	0.24±1.24E-10	2.68±3.82E-10
<i>June</i>	N/A	N/A
<i>July</i>	-0.42±6.15E-11	-0.92±1.59E-10
<i>August</i>	-0.22±1.75E-10	4.72±4.92E-10
<i>September</i>	N/A	N/A
<i>October</i>	N/A	N/A
<i>November</i>	N/A	N/A
<i>December</i>	N/A	N/A
Annual Total	2.16±3.95E-10	4.09±1.11E-09

Isotope	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual Total
<i>Co-60</i>	-0.50±6.88E-10	2.76±7.78E-10	0.00±1.33E-09	NA	0.23±1.69E-09
<i>Sr-90</i>	0.04±1.60E-09	-1.07±3.95E-10	1.87±1.29E-10	NA	0.12±1.65E-09
<i>Cs-134</i>	-3.00±7.25E-10	-2.63±8.30E-10	-1.34±1.96E-10	NA	-0.70±1.12E-09
<i>Cs-137</i>	5.60±6.24E-10	1.12±7.91E-10	-3.87±6.75E-10	NA	0.29±1.21E-09
<i>Eu-154</i>	-4.14±6.01E-09	-7.40±7.18E-09	-1.64±2.06E-09	NA	-1.32±0.96E-08
<i>U-232</i>	5.83±0.52E-11	0.00±1.63E-10	5.80±0.61E-11	NA	1.16±1.63E-10
<i>U-233/234</i>	6.01±7.30E-11	1.01±1.03E-10	2.97±1.18E-11	NA	1.91±1.27E-10
<i>U-235/236</i>	2.03±2.87E-11	2.30±6.06E-11	5.28±4.75E-12	NA	4.86±6.72E-11
<i>U-238</i>	4.04±4.05E-11	1.17±4.77E-11	1.54±0.93E-11	NA	6.75±6.33E-11
<i>Pu-238</i>	1.36±0.77E-10	-0.20±1.22E-10	1.12±1.00E-11	NA	1.27±1.45E-10
<i>Pu-239/240</i>	1.05±2.10E-11	-2.57±3.63E-11	3.91±1.64E-11	NA	2.39±4.50E-11
<i>Am-241</i>	1.82±1.15E-10	1.14±1.04E-10	6.95±7.10E-12	NA	3.03±1.55E-10
<i>Total U (g)</i>	2.34±0.05E-05	-4.03±0.10E-05	-1.28±0.06E-04	NA	-1.45±0.06E-04

*N/A - Not applicable. Ventilation system was not operating during these months.
NA - Not available.*

Table C - 2.9**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci/mL}$)
at ANLLWTVC***

Month	Alpha	Beta	Sr-90	Cs-137
January	1.44±5.69E-16	6.69±1.91E-15		
February	7.54±6.65E-16	9.05±2.03E-15		
March	2.69±6.26E-16	6.01±1.68E-15		
1st Qtr			-7.87±9.16E-17	0.20±1.29E-16
April	1.79±5.38E-16	6.03±1.63E-15		
May	4.04±6.08E-16	1.88±1.50E-15		
June	1.57±5.98E-16	0.64±1.47E-15		
2nd Qtr			-1.25±0.70E-16	-0.17±2.24E-16
July	-0.03±5.10E-16	0.69±1.48E-15		
August	-1.97±6.26E-16	0.83±1.52E-15		
September	-0.37±4.78E-16	1.55±1.59E-15		
3rd Qtr			-0.78±7.95E-17	-0.20±1.97E-16
October	2.23±5.30E-16	3.96±1.86E-15		
November	3.51±7.10E-16	5.44±2.20E-15		
December	Not Available			
4th Qtr			Not Applicable (see footnote)	

Table C - 2.10**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci/mL}$)
at ANLLWTVH***

Month	Alpha	Beta	Sr-90	Cs-137
January	0.38±5.57E-16	-0.08±1.44E-15		
February	1.86±5.19E-16	1.03±1.49E-15		
March	-0.31±5.87E-16	0.80±1.36E-15		
1st Qtr			-1.41±0.86E-16	0.36±1.92E-16
April	-1.70±4.83E-16	1.03±1.35E-15		
May	0.91±5.59E-16	-0.21±1.42E-15		
June	0.18±5.46E-16	0.49±1.43E-15		
2nd Qtr			-1.24±0.91E-16	0.62±2.29E-16
July	-0.44±4.96E-16	1.03±1.52E-15		
August	-1.93±6.18E-16	1.25±1.53E-15		
September	1.21±5.21E-16	0.46±1.47E-15		
3rd Qtr			-1.27±0.92E-16	0.81±2.07E-16
October	-0.21±4.52E-16	0.61±1.61E-15		
November	3.06±6.25E-16	1.46±1.72E-15		
December	Not Available			
4th Qtr			Not Applicable (see footnote)	

* ANLLWTVC is the "cold" operations side and ANLLWTVH is the "hot" process equipment side of ANLLWTV. No fourth-quarter sample was collected because the one-year sampling period was completed in the third-quarter 1995.

Table C - 2.11

**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci}/\text{mL}$)
at ANLAUNV**

Month	Alpha	Beta	Sr-90	Cs-137
January	0.35±2.59E-14	-2.32±6.63E-14		
February	0.19±2.18E-14	1.30±5.94E-14		
March	1.12±4.15E-14	0.46±8.11E-14		
1st Qtr			-6.93±3.54E-15	0.99±1.06E-14
April	0.18±2.97E-14	2.02±6.95E-14		
May	4.87±7.11E-15	-0.85±2.52E-14		
June	-5.01±8.50E-15	-0.56±1.81E-14		
2nd Qtr			-1.07±0.51E-14	-0.20±1.47E-14
July	-3.89±4.40E-15	0.30±2.28E-14		
August	1.28±1.66E-14	2.39±4.05E-14		
September	4.91±5.56E-15	-0.25±1.24E-14		
3rd Qtr			-2.90±6.79E-15	0.98±1.31E-14
October	2.74±4.73E-15	-1.62±1.66E-14		
November	-5.83±6.59E-15	3.14±3.23E-14		
December	0.58±1.13E-14	-1.45±2.45E-14		
4th Qtr			<i>Not Applicable</i>	

No fourth-quarter sample was collected because the one-year sampling period was completed in the third-quarter 1995.

Table C - 2.12

**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci/mL}$)
at ANLAGAM**

Month	Alpha	Beta			
<i>February</i>	6.27±7.24E-16	1.62±0.23E-14			
<i>March</i>	7.27±7.81E-16	1.60±0.24E-14			
<i>April</i>	6.50±7.14E-16	1.19±0.21E-14			
<i>May</i>	7.15±7.39E-16	8.84±2.12E-15			
<i>June</i>	5.56±6.78E-16	1.23±0.22E-14			
<i>July</i>	1.02±0.78E-15	1.52±0.25E-14			
<i>August</i>	6.40±8.16E-16	1.79±0.26E-14			
<i>September</i>	6.23±6.62E-16	1.25±0.23E-14			
<i>October</i>	3.99±5.76E-16	1.10±0.23E-14			
<i>November</i>	5.81±6.84E-16	2.02±1.73E-15			
<i>December</i>	-1.58±5.97E-16	1.08±1.51E-15			
	K-40	Co-60	Sr-90	Cs-137	
<i>1st Qtr</i>	6.45±6.94E-15	-0.85±5.72E-16	-4.31±2.48E-16	-0.76±5.43E-16	
<i>2nd Qtr</i>	0.80±4.29E-15	-0.66±2.45E-16	-1.67±0.80E-16	3.25±3.21E-16	
<i>3rd Qtr</i>	0.39±4.39E-15	1.04±2.12E-16	-0.13±9.90E-17	1.81±2.10E-16	
<i>4th Qtr</i>	0.00±5.38E-15	1.21±2.08E-16	4.30±1.31E-16	0.53±2.11E-16	
	U-232	U-233/234	U-235/236	U-238	Total U ($\mu\text{g/mL}$)
<i>1st Qtr</i>	1.06±0.10E-15	1.16±0.72E-16	0.96±3.36E-17	1.03±0.64E-16	1.72±0.03E-10
<i>2nd Qtr</i>	0.00±4.35E-17	5.84±2.72E-17	-0.27±1.35E-17	8.91±3.38E-17	1.91±0.02E-10
<i>3rd Qtr</i>	0.00±1.13E-17	6.17±1.62E-17	7.72±6.21E-18	5.63±1.54E-17	1.34±0.03E-10
<i>4th Qtr</i>	8.94±3.18E-17	7.58±1.95E-17	1.43±5.67E-18	7.34±1.90E-17	1.25±0.03E-10
	Pu-238	Pu-239/240	Am-241		
<i>1st Qtr</i>	5.59±4.41E-17	2.09±2.41E-17	1.32±0.65E-16		
<i>2nd Qtr</i>	1.52±4.58E-17	5.69±3.96E-17	1.02±0.59E-16		
<i>3rd Qtr</i>	-0.98±6.24E-18	0.49±3.95E-18	-2.57±9.47E-18		
<i>4th Qtr</i>	7.42±6.69E-18	2.43±3.45E-18	-0.02±8.80E-18		

Table C - 2.13

*1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci/mL}$)
at ANNDAAM*

Month	Alpha	Beta				
<i>February</i>	1.28±0.88E-15	1.74±0.24E-14				
<i>March</i>	1.05±0.85E-15	1.73±0.25E-14				
<i>April</i>	7.33±7.33E-16	1.46±0.23E-14				
<i>May</i>	7.83±7.55E-16	9.46±2.16E-15				
<i>June</i>	9.56±7.68E-16	1.28±0.23E-14				
<i>July</i>	1.17±0.81E-15	1.80±0.26E-14				
<i>August</i>	1.28±0.95E-15	1.88±0.26E-14				
<i>September</i>	8.37±7.16E-16	1.59±0.25E-14				
<i>October</i>	1.13±0.76E-15	2.32±0.29E-14				
<i>November</i>	1.06±0.79E-15	1.48±0.25E-14				
<i>December</i>	6.29±7.78E-16	1.92±0.26E-14				
	K-40	Co-60	Sr-90	Cs-137		
<i>1st Qtr</i>	1.04±0.64E-14	3.47±4.96E-16	-0.58±2.93E-16	-1.91±4.99E-16		
<i>2nd Qtr</i>	2.24±2.68E-15	1.24±2.29E-16	-2.65±1.12E-16	4.87±3.71E-16		
<i>3rd Qtr</i>	4.21±4.17E-15	-0.75±2.30E-16	-3.09±7.59E-17	-0.24±2.26E-16		
<i>4th Qtr</i>	4.50±4.07E-15	1.61±2.06E-16	2.22±1.17E-16	2.78±2.54E-16		
	U-232	U-233/234	U-235/236	U-238	Total U	
					($\mu\text{g/mL}$)	
<i>1st Qtr</i>	2.85±0.26E-17	6.67±6.28E-17	2.50±3.73E-17	7.50±6.05E-17	1.19±0.01E-10	
<i>2nd Qtr</i>	4.23±0.44E-15	6.82±4.10E-17	-0.34±1.26E-17	2.69±3.06E-17	1.87±0.03E-10	
<i>3rd Qtr</i>	2.39±2.51E-17	6.95±1.76E-17	7.98±5.69E-18	8.38±1.97E-17	1.19±0.03E-10	
<i>4th Qtr</i>	1.06±0.49E-16	7.08±1.91E-17	4.28±4.29E-18	6.29±1.70E-17	1.12±0.02E-10	
	Pu-238	Pu-239/240	Am-241			
<i>1st Qtr</i>	-2.36±4.33E-17	0.84±1.68E-17	1.74±0.90E-16			
<i>2nd Qtr</i>	6.68±6.62E-17	1.98±2.38E-17	2.13±3.13E-17			
<i>3rd Qtr</i>	1.50±0.39E-16	1.24±1.02E-17	0.23±1.19E-17			
<i>4th Qtr</i>	3.88±6.85E-18	-0.76±1.52E-18	3.18±9.76E-18			

Table C - 2.14

**1995 Airborne Radioactivity Concentrations ($\mu\text{Ci}/\text{mL}$)
at ANSDAT9**

Month	Alpha	Beta	H-3		
<i>January</i>	0.69±1.02E-15	1.65±0.34E-14	0.70±1.41E-12		
<i>February</i>	9.65±9.74E-16	2.04±0.35E-14	9.77±3.23E-13		
<i>March</i>	0.98±1.15E-15	1.67±0.32E-14	2.76±0.46E-12		
<i>April</i>	0.72±1.01E-15	1.51±0.31E-14	1.52±0.41E-12		
<i>May</i>	3.49±9.29E-16	8.95±2.92E-15	1.14±0.57E-12		
<i>June</i>	4.90±9.40E-16	1.49±0.32E-14	2.95±0.83E-12		
<i>July</i>	0.78±1.58E-15	1.80±0.54E-14	3.33±1.36E-12		
<i>August</i>	0.33±1.10E-15	2.25±0.38E-14	1.66±1.24E-12		
<i>September</i>	8.25±9.93E-16	1.58±0.33E-14	3.72±0.87E-12		
<i>October</i>	1.50±1.70E-15	2.31±0.54E-14	2.07±0.74E-12		
<i>November</i>	0.99±1.32E-15	1.68±0.41E-14	1.72±0.47E-12		
<i>December</i>	-0.38±1.40E-13	-0.10±3.10E-13	8.76±2.42E-13		
	K-40	Co-60	Cs-137	I-129	
<i>1st Qtr</i>	2.27±6.27E-15	2.12±2.90E-16	-2.78±2.90E-16	4.07±4.05E-16	
<i>2nd Qtr</i>	4.31±6.47E-15	-0.42±3.39E-16	5.06±2.57E-16	1.27±2.33E-16	
<i>3rd Qtr</i>	0.00±9.09E-15	-1.44±3.09E-16	-2.16±3.38E-16	1.70±2.46E-16	
<i>4th Qtr</i>	3.96±7.53E-15	1.34±4.04E-16	-0.03±3.99E-16	-1.12±3.13E-16	

Table C - 2.15

*1995 Airborne Radioactive Effluent Totals (curies)
from Outdoor Ventilation Enclosures/Portable Ventilation Units*

Isotope	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<i>Gross Alpha</i>	4.62±4.74E-11	N/A	N/A	N/A
<i>Gross Beta</i>	4.32±1.51E-10	N/A	N/A	N/A
<i>Co-60</i>	0.56±1.45E-10	N/A	N/A	N/A
<i>Sr-90</i>	-3.73±6.41E-11	N/A	N/A	N/A
<i>Cs-134</i>	1.02±1.59E-10	N/A	N/A	N/A
<i>Cs-137</i>	0.79±1.53E-10	N/A	N/A	N/A
<i>Eu-154</i>	-0.30±1.29E-09	N/A	N/A	N/A
<i>U-232</i>	1.88±0.91E-11	N/A	N/A	N/A
<i>U-233/234</i>	0.00±2.26E-11	N/A	N/A	N/A
<i>U-235/236</i>	1.53±1.54E-11	N/A	N/A	N/A
<i>U-238</i>	5.42±2.72E-11	N/A	N/A	N/A
<i>Pu-238</i>	0.03±1.17E-11	N/A	N/A	N/A
<i>Pu-239/240</i>	4.21±5.96E-12	N/A	N/A	N/A
<i>Am-241</i>	0.74±1.15E-11	N/A	N/A	N/A
<i>Total U (g)</i>	-1.84±0.04E-05	N/A	N/A	N/A

N/A - Not applicable; No PVUs operational during this quarter.

Table C - 2.16

**1995 Airborne Radioactivity Concentrations ($\mu\text{Ci}/\text{mL}$)
at the Rock Springs Road Air Sampler (AFRSPRD)**

Month	Alpha	Beta	H-3			
<i>January</i>	0.94±1.06E-15	1.62±0.33E-14	2.93±4.55E-13			
<i>February</i>	1.42±1.07E-15	1.89±0.34E-14	4.20±4.28E-13			
<i>March</i>	1.14±1.17E-15	1.79±0.32E-14	7.32±0.41E-12			
<i>April</i>	1.20±1.11E-15	1.58±0.31E-14	5.19±2.79E-13			
<i>May</i>	0.85±1.07E-15	1.00±0.30E-14	3.18±5.98E-13			
<i>June</i>	0.88±1.03E-15	1.24±0.30E-14	0.34±1.13E-12			
<i>July</i>	0.87±1.03E-15	1.61±0.34E-14	0.04±2.43E-12			
<i>August</i>	0.82±1.20E-15	2.02±0.36E-14	0.87±1.78E-12			
<i>September</i>	7.41±9.56E-16	1.57±0.33E-14	2.03±1.22E-12			
<i>October</i>	1.48±1.10E-15	2.46±0.39E-14	2.37±0.66E-12			
<i>November</i>	7.06±9.88E-16	1.46±0.33E-14	8.16±3.60E-13			
<i>December</i>	0.25±1.02E-15	2.01±0.35E-14	3.27±2.46E-13			
	K-40	Co-60	Sr-90	Cs-137	I-129	
<i>1st Qtr</i>	0.79±6.28E-15	0.57±2.96E-16	-2.91±1.40E-16	3.00±3.09E-16	2.11±2.16E-16	
<i>2nd Qtr</i>	6.86±4.68E-15	3.55±5.47E-16	-1.90±1.53E-16	-1.20±3.10E-16	0.41±2.33E-16	
<i>3rd Qtr</i>	6.14±3.74E-15	-0.60±3.27E-16	-1.58±1.12E-16	0.77±2.88E-16	6.88±3.58E-16	
<i>4th Qtr</i>	0.00±7.83E-15	0.20±3.14E-16	6.00±1.72E-16	-3.17±3.04E-16	-0.70±1.90E-16	
	U-232	U-233/234	U-235/236	U-238	Total U ($\mu\text{g}/\text{mL}$)	
<i>1st Qtr</i>	4.38±0.40E-17	1.42±0.53E-16	1.63±3.06E-17	1.42±0.54E-16	2.24±0.03E-10	
<i>2nd Qtr</i>	0.00±6.01E-17	1.24±0.58E-16	1.53±2.60E-17	1.29±0.52E-16	2.62±0.03E-10	
<i>3rd Qtr</i>	9.23±1.15E-18	9.74±3.38E-17	0.81±1.10E-17	1.01±0.34E-16	2.00±0.05E-10	
<i>4th Qtr</i>	1.77±0.52E-16	1.23±0.29E-16	4.62±7.87E-18	1.09±0.27E-16	2.07±0.04E-10	
	Pu-238	Pu-239/240	Am-241			
<i>1st Qtr</i>	2.70±2.79E-17	1.33±1.54E-17	0.84±1.19E-17			
<i>2nd Qtr</i>	2.32±3.21E-17	0.92±1.78E-17	-1.84±0.99E-16			
<i>3rd Qtr</i>	2.60±3.54E-17	-0.1±1.51E-17	0.97±1.32E-17			
<i>4th Qtr</i>	0.75±1.15E-17	1.12±3.44E-18	0.84±1.42E-17			

Table C - 2.17**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci}/\text{mL}$)
at the Dutch Hill Air Sampler (AFBOEHN)**

Month	Alpha	Beta	Sr-90	Cs-137
January	6.72±9.93E-16	1.61±0.33E-14		
February	1.04±0.98E-15	2.38±0.36E-14		
March	1.29±1.19E-15	1.97±0.33E-14		
1st Qtr			5.37±2.42E-16	-0.30±2.84E-16
April	1.12±1.09E-15	1.72±0.31E-14		
May	0.79±1.09E-15	1.23±0.33E-14		
June	0.90±1.04E-15	1.71±0.33E-14		
2nd Qtr			-0.73±1.56E-16	0.72±3.72E-16
July	1.86±1.78E-15	2.06±0.49E-14		
August	0.71±1.16E-15	2.76±0.40E-14		
September	5.19±8.84E-16	2.05±0.35E-14		
3rd Qtr			-1.03±1.13E-16	-0.43±3.14E-16
October	1.26±1.04E-15	3.21±0.42E-14		
November	0.36±1.06E-15	1.75±0.40E-14		
December	0.68±1.13E-15	2.00±0.35E-14		
4th Qtr			1.23±1.20E-16	-0.28±3.14E-16

Table C - 2.18**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci}/\text{mL}$)
at the Fox Valley Air Sampler (AFFXVRD)**

Month	Alpha	Beta	Sr-90	Cs-137
January	5.25±9.78E-16	1.67±0.34E-14		
February	1.38±1.08E-15	2.25±0.36E-14		
March	1.26±1.21E-15	1.85±0.33E-14		
1st Qtr			-1.38±0.54E-16	-1.48±3.14E-16
April	6.19±9.90E-16	1.77±0.32E-14		
May	0.81±1.08E-15	1.14±0.31E-14		
June	4.24±8.69E-16	1.49±0.31E-14		
2nd Qtr			2.44±1.74E-16	-0.73±3.56E-16
July	0.48±1.29E-15	1.80±0.52E-14		
August	0.46±9.73E-16	2.07±0.35E-14		
September	7.54±9.23E-16	1.69±0.33E-14		
3rd Qtr			-1.99±1.59E-16	2.92±3.00E-16
October	1.03±0.96E-15	2.37±0.37E-14		
November	8.23±9.78E-16	1.84±0.34E-14		
December	0.65±1.11E-15	2.20±0.36E-14		
4th Qtr			4.93±1.45E-16	-1.84±3.20E-16

Table C - 2.19**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci}/\text{mL}$)
at Location AFBLKST**

Month	Alpha	Beta	Sr-90	Cs-137
January	1.00±1.10E-15	1.34±0.32E-14		
February	8.00±9.35E-16	1.96±0.35E-14		
March	0.41±1.03E-15	1.55±0.32E-14		
1st Qtr			-1.92±2.50E-16	0.96±2.87E-16
April	0.92±1.08E-15	1.48±0.31E-14		
May	1.38±8.59E-16	1.03±0.30E-14		
June	1.09±1.14E-15	1.58±0.33E-14		
2nd Qtr			-2.69±1.42E-16	-2.19±3.43E-16
July	1.48±1.16E-15	1.99±0.36E-14		
August	0.57±1.14E-15	2.30±0.37E-14		
September	7.76±9.61E-16	1.82±0.34E-14		
3rd Qtr			-6.58±9.19E-17	-0.27±1.96E-16
October	1.25±1.04E-15	2.46±0.38E-14		
November	5.68±9.45E-16	1.58±0.34E-14		
December	1.05±1.19E-15	2.07±0.35E-14		
4th Qtr			4.79±2.11E-16	0.23±3.20E-16

Table C - 2.20**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci}/\text{mL}$)
at the Route 240 Air Sampler (AFRT240)**

Month	Alpha	Beta	Sr-90	Cs-137
January	0.99±1.07E-15	1.40±0.31E-14		
February	1.07±0.98E-15	1.76±0.33E-14		
March	1.02±1.14E-15	1.44±0.30E-14		
1st Qtr			-0.22±2.41E-16	0.25±2.28E-16
April	0.85±1.05E-15	1.40±0.30E-14		
May	0.74±1.05E-15	1.28±0.32E-14		
June	1.21±1.12E-15	1.37±0.31E-14		
2nd Qtr			-2.55±1.51E-16	-0.30±3.53E-16
July	1.28±1.10E-15	1.97±0.35E-14		
August	0.92±1.24E-15	2.28±0.37E-14		
September	0.89±1.00E-15	1.68±0.34E-14		
3rd Qtr			-1.81±1.29E-16	1.49±3.13E-16
October	9.95±9.95E-16	2.59±0.40E-14		
November	0.92±1.09E-15	2.04±0.38E-14		
December	0.20±1.01E-15	2.17±0.35E-14		
4th Qtr			3.15±1.54E-16	0.38±3.36E-16

Table C - 2.21**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci/mL}$)
at the Thomas Corners Road Air Sampler (AFTCORD)**

Month	Alpha	Beta	Sr-90	Cs-137
January	0.72±1.02E-15	1.50±0.33E-14		
February	1.34±1.07E-15	2.02±0.35E-14		
March	0.63±1.07E-15	1.61±0.32E-14		
1st Qtr			-6.68±9.77E-17	3.47±2.95E-16
April	0.69±1.02E-15	1.46±0.31E-14		
May	3.54±9.43E-16	1.03±0.30E-14		
June	0.77±1.02E-15	1.48±0.32E-14		
2nd Qtr			-1.51±1.42E-16	-2.66±3.01E-16
July	0.81±1.05E-15	1.84±0.36E-14		
August	0.57±1.66E-15	2.20±0.50E-14		
September	0.90±1.00E-15	1.53±0.33E-14		
3rd Qtr			-1.39±1.40E-16	2.88±3.60E-16
October	9.15±9.68E-16	2.42±0.39E-14		
November	1.01±1.33E-15	1.58±0.42E-14		
December	0.33±1.06E-15	1.99±0.35E-14		
4th Qtr			2.62±0.31E-15	-1.01±3.20E-16

Table C - 2.22**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci/mL}$)
at the West Valley Air Sampler (AFWEVAL)**

Month	Alpha	Beta	Sr-90	Cs-137
January	5.04±9.39E-16	1.75±0.33E-14		
February	1.15±1.01E-15	2.26±0.36E-14		
March	0.84±1.09E-15	1.90±0.33E-14		
1st Qtr			-6.67±9.67E-17	-1.81±2.74E-16
April	0.84±1.14E-15	1.66±0.34E-14		
May	0.81±1.07E-15	1.32±0.32E-14		
June	1.05±1.09E-15	1.73±0.33E-14		
2nd Qtr			-2.04±2.00E-16	2.72±3.21E-16
July	1.15±1.11E-15	2.33±0.38E-14		
August	0.90±1.20E-15	2.52±0.39E-14		
September	1.18±1.07E-15	1.97±0.35E-14		
3rd Qtr			-2.64±1.90E-16	2.93±3.05E-16
October	9.12±9.89E-16	3.16±0.43E-14		
November	3.85±9.01E-16	1.75±0.35E-14		
December	0.34±1.04E-15	2.14±0.35E-14		
4th Qtr			3.94±1.41E-16	-0.79±3.31E-16

Table C - 2.23

*1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci}/\text{mL}$)
at the Springville Air Sampler (AFSPRVL)*

Month	Alpha	Beta	Sr-90	Cs-137
<i>January</i>	2.69±8.82E-16	1.44±0.32E-14		
<i>February</i>	1.08±0.99E-15	1.72±0.33E-14		
<i>March</i>	0.56±1.03E-15	1.47±0.30E-14		
1st Qtr			-0.91±1.30E-16	0.18±2.98E-16
<i>April</i>	5.05±9.51E-16	1.42±0.30E-14		
<i>May</i>	3.90±9.54E-16	1.10±0.31E-14		
<i>June</i>	1.12±1.11E-15	1.30±0.31E-14		
2nd Qtr			-0.96±1.13E-16	3.01±3.33E-16
<i>July</i>	1.11±1.08E-15	1.65±0.34E-14		
<i>August</i>	0.95±1.25E-15	1.92±0.36E-14		
<i>September</i>	6.84±9.53E-16	1.51±0.33E-14		
3rd Qtr			-0.36±1.61E-16	1.84±3.05E-16
<i>October</i>	1.22±1.05E-15	2.06±0.37E-14		
<i>November</i>	5.73±9.48E-16	1.34±0.33E-14		
<i>December</i>	0.90±1.15E-15	1.67±0.33E-14		
4th Qtr			2.79±1.70E-16	-1.30±3.13E-16

Table C - 2.24

**1995 Airborne Radioactivity Concentrations ($\mu\text{Ci}/\text{mL}$)
at the Great Valley Background Air Sampler (AFGRVAL)**

Month	Alpha	Beta	H-3			
<i>January</i>	2.81±9.20E-16	1.49±0.33E-14	0.07±1.92E-12			
<i>February</i>	1.54±1.13E-15	1.79±0.34E-14	0.31±1.69E-12			
<i>March</i>	0.70±1.10E-15	1.52±0.32E-14	1.22±0.14E-11			
<i>April</i>	1.26±3.58E-15	1.76±0.85E-14	7.15±7.89E-12			
<i>May</i>	0.90±1.07E-15	1.19±0.31E-14	1.69±6.46E-13			
<i>June</i>	0.87±1.02E-15	1.44±0.31E-14	0.28±1.10E-12			
<i>July</i>	1.32±1.13E-15	1.80±0.35E-14	0.64±1.16E-12			
<i>August</i>	0.73±1.16E-15	2.33±0.37E-14	0.38±1.27E-12			
<i>September</i>	0.95±1.00E-15	1.79±0.34E-14	1.61±0.76E-12			
<i>October</i>	7.66±9.13E-16	2.66±0.40E-14	1.48±0.66E-12			
<i>November</i>	1.10±1.09E-15	1.58±0.34E-14	1.80±0.77E-12			
<i>December</i>	0.62±1.10E-15	2.07±0.35E-14	2.60±7.42E-13			
	K-40	Co-60	Sr-90	Cs-137	I-129	
<i>1st Qtr</i>	-0.04±3.48E-15	-1.15±2.83E-16	-3.78±1.42E-16	0.10±2.67E-16	0.06±2.27E-16	
<i>2nd Qtr</i>	3.67±8.96E-15	-0.32±4.45E-16	-2.26±1.84E-16	-3.71±4.10E-16	-0.15±2.73E-16	
<i>3rd Qtr</i>	1.84±8.14E-15	4.37±5.03E-16	0.72±1.47E-16	8.12±6.77E-16	1.52±1.99E-16	
<i>4th Qtr</i>	0.83±9.66E-15	0.31±3.07E-16	5.27±1.85E-16	-1.02±3.22E-16	-1.10±1.99E-16	
	U-232	U-233/234	U-235/236	U-238	Total U ($\mu\text{g}/\text{mL}$)	
<i>1st Qtr</i>	3.79±0.35E-17	1.25±0.48E-16	0.83±1.77E-17	1.21±0.47E-16	2.69±0.03E-10	
<i>2nd Qtr</i>	0.00±7.01E-17	1.92±0.70E-16	0.09±2.95E-17	1.34±0.63E-16	3.47±0.05E-10	
<i>3rd Qtr</i>	0.00±4.35E-17	1.03±0.29E-16	-0.73±1.02E-17	7.29±2.47E-17	2.18±0.06E-10	
<i>4th Qtr</i>	8.29±3.87E-17	1.12±0.25E-16	1.24±0.79E-17	1.04±0.24E-16	2.22±0.06E-10	
	Pu-238	Pu-239/240	Am-241			
<i>1st Qtr</i>	1.92±2.32E-17	0.00±1.43E-17	4.05±3.08E-17			
<i>2nd Qtr</i>	0.27±1.12E-16	9.78±8.29E-17	4.71±3.58E-17			
<i>3rd Qtr</i>	-0.35±1.33E-17	-1.97±3.92E-18	1.63±1.75E-17			
<i>4th Qtr</i>	1.28±1.00E-17	7.80±5.92E-18	0.70±1.40E-17			

Table C - 2.25

**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci}/\text{mL}$)
at the Nashville Background Air Sampler (AFNASHV)***

Month	Alpha	Beta	Sr-90	Cs-137
May	0.87±1.06E-15	1.09±0.30E-14		
June	1.10±1.08E-15	1.47±0.31E-14		
2nd Qtr			-2.67±2.19E-16	1.34±5.58E-16
July	1.50±1.17E-15	1.90±0.35E-14		
August	0.51±1.11E-15	2.26±0.37E-14		
September	7.04±9.37E-16	2.01±0.35E-14		
3rd Qtr			-5.76±9.11E-17	3.02±2.77E-16
October	1.00±0.98E-15	2.53±0.39E-14		
November	1.03±1.07E-15	1.78±0.35E-14		
December	0.84±1.15E-15	2.06±0.35E-14		
4th Qtr			8.77±1.49E-16	1.37±3.21E-16

Table C - 2.26

**1995 Radioactivity Concentrations in Airborne Particulates ($\mu\text{Ci}/\text{mL}$)
at the Dunkirk Background Air Sampler (AFDNKRRK)**

Month	Alpha	Beta	Sr-90	Cs-137
January	1.04±1.08E-15	1.75±0.33E-14		
February	1.58±1.11E-15	2.17±0.35E-14		
March	0.72±1.06E-15	1.89±0.33E-14		
1st Qtr			1.16±0.95E-16	-0.08±2.70E-16
April	0.88±1.02E-15	1.62±0.31E-14		
May	4.52±9.49E-16	1.11±0.30E-14		
June	1.04±1.00E-15	1.21±0.30E-14		
2nd Qtr			-0.66±1.87E-16	2.29±3.75E-16

* Replaces AFDNKRRK.

Table C - 2.27

Radioactivity in Fallout During 1995 (nCi/m²/mo)

Dutch Hill (AFDHFOP)				Rain Gauge (ANRGFOP)			
Month	Alpha	Beta	Tritium (μ Ci/mL)	Month	Alpha	Beta	Tritium (μ Ci/mL)
January	0.00±1.36E-02	4.32±0.82E-01	0.00±1.00E-07	January	2.61±3.12E-01	4.78±1.93E-01	0.00±1.00E-07
February	0.40±1.09E-02	2.94±0.39E-01	0.00±1.00E-07	February	-1.31±3.15E-01	5.00±2.19E-01	0.00±1.00E-07
March	-0.42±1.00E-02	6.87±2.46E-02	1.56±0.82E-07	March	1.19±2.57E-02	2.73±0.38E-01	9.55±8.38E-08
April	0.60±1.03E-02	2.74±0.29E-01	2.17±7.71E-08	April	0.89±2.74E-02	2.98±0.50E-01	2.75±7.83E-08
May	2.41±1.35E-02	9.31±0.36E-01	0.00±1.00E-07	May	2.32±0.60E-02	2.71±0.20E-01	0.00±1.00E-07
June	1.19±0.37E-02	2.43±0.14E-01	0.00±1.00E-07	June	2.00±0.68E-02	2.91±0.22E-01	0.00±1.00E-07
July	4.00±2.81E-02	1.41±0.12E-00	0.00±1.00E-07	July	8.04±1.58E-02	8.52±0.63E-01	0.00±1.00E-07
August	9.08±6.39E-03	1.98±0.21E-01	0.00±1.00E-07	August	1.07±0.62E-02	1.08±0.21E-01	0.00±1.00E-07
September	1.09±0.39E-02	3.08±0.18E-01	0.00±1.00E-07	September	2.33±0.58E-02	4.06±0.26E-01	7.45±8.02E-08
October	5.31±2.66E-03	1.03±0.11E-01	3.02±7.86E-08	October	2.19±1.23E-02	4.58±0.59E-01	0.00±1.00E-07
November	2.43±1.04E-02	3.90±0.43E-01	2.12±0.78E-07	November	1.28±1.20E-02	6.20±0.61E-01	3.70±7.58E-08
December	2.07±0.56E-02	4.48±0.29E-01	1.38±0.76E-07	December	1.76±0.57E-02	7.25±0.35E-01	0.00±1.00E-07
Route 240 (AF24FOP)				Thomas Corners (AFTCFOP)			
Month	Alpha	Beta	Tritium (μ Ci/mL)	Month	Alpha	Beta	Tritium (μ Ci/mL)
January	3.59±2.78E-02	3.41±0.70E-01	4.84±7.60E-08	January	5.16±4.00E-02	7.31±1.19E-01	0.00±1.00E-07
February	1.95±1.97E-02	3.89±0.54E-01	0.00±1.00E-07	February	6.81±4.09E-02	5.33±0.82E-01	4.32±7.70E-08
March	1.02±1.45E-02	2.27±0.32E-01	4.71±8.10E-08	March	1.22±2.07E-02	1.57±0.31E-01	5.74±8.12E-08
April	3.10±1.86E-02	3.42±0.38E-01	4.95±7.86E-08	April	2.43±2.18E-02	4.19±0.52E-01	7.57±7.76E-08
May	1.33±0.46E-02	2.55±0.17E-01	0.00±1.00E-07	May	3.67±0.60E-02	4.24±0.21E-01	9.02±7.86E-08
June	1.21±0.32E-02	2.09±0.13E-01	0.00±1.00E-07	June	1.76±0.47E-02	2.39±0.18E-01	2.75±7.83E-08
July	8.92±1.59E-02	9.09±0.62E-01	1.74±7.72E-08	July	7.41±1.58E-02	9.94±0.70E-01	5.92±7.70E-08
August	2.53±4.85E-03	2.44±0.26E-01	1.83±7.65E-08	August	4.78±5.82E-03	2.26±0.28E-01	0.00±1.00E-07
September	2.30±0.49E-02	4.24±0.23E-01	1.88±0.85E-07	September	3.83±0.84E-02	6.67±0.40E-01	1.42±0.84E-07
October	5.11±1.37E-02	7.05±0.61E-01	9.78±7.66E-08	October	3.39±1.26E-02	4.52±0.54E-01	0.00±1.00E-07
November	1.34±1.18E-02	5.50±0.58E-01	0.27±7.69E-08	November	2.64±1.31E-02	6.06±0.60E-01	1.40±0.77E-07
December	2.08±0.56E-02	4.59±0.29E-01	0.00±1.00E-07	December	1.39±0.50E-02	2.60±0.23E-01	6.87±7.62E-08
Fox Valley (AFFXFOP)							
Month	Alpha	Beta	Tritium (μ Ci/mL)				
January	2.25±2.70E-02	5.66±0.99E-01	0.00±1.00E-07				
February	3.37±3.09E-02	4.45±0.74E-01	1.87±7.59E-08				
March	0.80±1.74E-02	2.15±0.32E-01	9.79±8.01E-08				
April	1.28±1.81E-02	3.47±0.44E-01	7.91±8.00E-08				
May	1.38±0.47E-02	2.27±0.17E-01	2.15±8.26E-08				
June	1.51±0.59E-02	2.43±0.20E-01	0.00±1.00E-07				
July	8.65±1.43E-02	7.34±0.52E-01	3.57±7.71E-08				
August	1.53±0.60E-02	2.83±0.26E-01	0.00±1.00E-07				
September	2.87±0.60E-02	4.64±0.25E-01	1.45±0.87E-07				
October	7.22±1.70E-02	5.28±0.56E-01	0.00±1.00E-07				
November	2.45±1.31E-02	6.88±0.63E-01	8.12±7.57E-08				
December	1.94±0.55E-02	3.80±0.27E-01	0.00±1.00E-07				

Table C - 2.27 (concluded)

pH (standard units) of Precipitation Collected in Fallout Pots in 1995

Month	Dutch Hill (AFDHFOP)	Fox Valley Road (AFFXFOP)	Route 240 (AF24FOP)	Thomas Corners Road (AFTCFOP)	Rain Gauge (ANRGFOP)
<i>January</i>	4.04	4.24	3.97	4.06	6.79
<i>February</i>	3.76	4.02	3.81	4.30	7.56
<i>March</i>	3.66	5.88	4.16	6.36	6.71
<i>April</i>	3.06	4.29	3.25	3.48	6.49
<i>May</i>	7.58	6.28	7.22	3.83	8.61
<i>June</i>	7.41	8.71	4.38	4.58	8.47
<i>July</i>	6.07	3.83	3.64	3.58	3.69
<i>August</i>	4.61	3.56	3.58	3.81	3.92
<i>September</i>	4.27	3.80	3.56	3.01	3.86
<i>October</i>	6.22	4.68	4.08	4.23	4.05
<i>November</i>	4.10	3.44	3.49	3.86	4.17
<i>December</i>	3.97	4.53	4.10	6.65	6.25