

## REPORT OF RADIOACTIVE EFFLUENTS

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Facility: Surry Power StationDOCKET: 50-280 and 50-281YEAR: 1982

06-25-80

## 1. LIQUID RELEASES

	UNITS	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	TOTAL	± Error
1. Gross Radioactivity (Bq)									
(a) Total Release	Curies	1.00E+0	7.67E-1	7.61E-5	1.33E+0	9.52E-1	4.83E-1		
(b) Avg. Concentration Released	µCi/ml	4.45E-9	5.18E-9	3.40E-9	6.21E-9	4.18E-9	2.06E-9		
(c) Maximum Concentration Released	µCi/ml	6.51E-9	2.15E-8	5.00E-9	5.74E-9	4.33E-9	3.58E-9		
2. Tritium									
(a) Total Released	Curies	3.92E+1	8.66E+1	6.28E+1	6.57E+1	1.14E+2	4.31E+1	4.11E+2	3.50E+1
(b) Avg. Concentration Released	µCi/ml	1.73E-7	5.85E-7	2.79E-7	3.07E-7	5.00E-7	1.83E-7		
3. Dissolved Noble Gases									
(a) Total Release	Curies	3.59E+0	5.96E+0	3.04E+0	4.07E+0	2.34E+0	1.58E+0	2.06E+1	1.75E+0
(b) Avg. Concentration Released	µCi/ml	1.59E-8	4.03E-8	1.35E-8	1.90E-8	1.03E-8	6.72E-9		
4. Gross Alpha Radioactivity									
(a) Total Released	Curies	3.81E-6	*	2.07E-6	9.36E-6	5.73E-6	7.92E-6	2.89E-5	2.46E-6
(b) Avg. Concentration Released	µCi/ml	1.68E-14	*	9.20E-15	4.37E-14	2.51E-14	3.37E-14		
5. Vol. of Liquid to Disch. Canal	Liters	4.86E+7	4.74E+7	5.32E+7	5.32E+7	5.15E+7	4.29E+7	2.97E+8	1.04E+7
6. Vol. of Dilution Water	Liters	2.26E+11	1.48E+11	2.25E+11	2.14E+11	2.28E+11	2.35E+11	1.28E+12	4.47E+10
7. Isotopes Released MPC µCi/ml	Curies								
I-131 3 x 10 <sup>-7</sup>		2.75E-1	4.23E-1	1.91E-1	2.25E-1	1.49E-1	3.32E-2	1.30E+0	1.10E-1
I-132 8 x 10 <sup>-6</sup>		3.13E-4	2.09E-4	*	1.97E-4	4.33E-5	*	7.62E-4	6.48E-5
I-133 1 x 10 <sup>-6</sup>		5.09E-2	2.78E-2	1.64E-2	4.64E-2	1.54E-2	5.26E-3	1.62E-1	1.38E-2
I-134 2 x 10 <sup>-5</sup>		*	*	*	*	*	*		
I-135 4 x 10 <sup>-6</sup>		4.67E-3	1.69E-3	8.45E-4	5.03E-3	4.99E-4	4.45E-4	1.32E-2	1.12E-3
Cs-134 9 x 10 <sup>-6</sup>		2.74E-1	1.46E-1	2.32E-1	3.10E-1	2.26E-1	7.47E-2	1.26E+0	1.07E-1
Cs-136 6 x 10 <sup>-5</sup>		1.53E-2	7.64E-3	3.21E-3	1.59E-2	4.91E-3	1.75E-4	4.71E-2	4.01E-3
Cs-137 2 x 10 <sup>-5</sup>		4.06E-1	2.12E-1	3.47E-1	4.63E-1	3.38E-1	1.13E-1	1.88E+0	1.60E-1
Kr-85 3 x 10 <sup>-6</sup>		*	*	*	*	*	*		
Co-57 4 x 10 <sup>-4</sup>		5.05E-5	4.37E-5	4.11E-5	1.24E-5	7.99E-6	1.53E-4	3.09E-4	2.62E-5
Co-58 9 x 10 <sup>-5</sup>		1.08E-1	1.21E-1	1.35E-1	7.78E-2	8.68E-2	3.90E-2	5.68E-1	4.82E-2
Co-60 3 x 10 <sup>-5</sup>		8.00E-2	1.00E-1	5.38E-2	5.53E-2	5.80E-2	5.79E-2	4.05E-1	3.44E-2
Mn-54 1 x 10 <sup>-4</sup>		3.71E-3	4.22E-3	1.83E-3	2.69E-3	2.08E-3	2.04E-3	1.66E-2	1.41E-3
Na-24 3 x 10 <sup>-5</sup>		1.38E-1	2.05E-1	4.52E-2	3.43E-2	5.60E-3	3.44E-3	4.32E-1	3.67E-2
Cr-51 2 x 10 <sup>-3</sup>		1.34E-2	3.15E-2	1.87E-3	9.54E-3	1.67E-2	5.62E-3	7.86E-2	6.68E-3
Pu-59 5 x 10 <sup>-5</sup>		1.46E-4	1.57E-3	7.10E-4	1.07E-3	1.83E-3	2.78E-4	5.60E-3	4.76E-4
Nb-95 1 x 10 <sup>-4</sup>		1.39E-3	1.64E-3	3.44E-4	7.17E-4	6.62E-4	4.53E-4	5.21E-3	4.43E-4
Ba-La-140 2 x 10 <sup>-5</sup>		*	2.63E-3	*	8.03E-5	8.66E-5	*	2.80E-3	2.38E-4
Rh-88 -		1.30E-2	2.76E-2	1.10E-2	8.19E-3	1.04E-2	1.07E-2	1.11E-1	9.43E-3
Sb-124 2 x 10 <sup>-5</sup>		1.19E-4	3.37E-3	2.46E-3	1.26E-3	8.21E-3	1.62E-3	1.70E-2	1.45E-3
Sb-125 1 x 10 <sup>-4</sup>		4.70E-4	2.07E-3	5.28E-3	2.20E-3	1.13E-2	3.06E-3	2.44E-2	2.07E-3

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## REPORT OF RADIOACTIVE EFFLUENTS

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FACILITY: Surry Power StationDOCKET: 50-280 and 50-281YEAR: 1982

## 1. LIQUID RELEASES (CON'T)

	UNITS	JAN	FEB	MARCH	APRIL	MAY	JUNE	TOTAL	Error
7. Isotopes Released MPC $\mu\text{Ci}/\text{ml}$	Curies								
Ce-141 $9 \times 10^{-5}$		*	*	6.04E-6	*	*	*	6.04E-6	5.13E-7
Ce-144 $1 \times 10^{-5}$		3.61E-4	1.13E-3	6.14E-4	2.41E-3	*	*	4.52E-3	3.84E-4
Xe-131m $3 \times 10^{-6}$		6.13E-3	1.91E-1	2.64E-2	4.40E-2	3.68E-2	4.23E-4	3.05E-1	2.59E-2
Xe-133 $3 \times 10^{-6}$		3.04E+0	5.49E+0	2.66E+0	3.62E+0	2.01E+0	1.30E+0	1.81E+1	1.54E+0
X3-135 $3 \times 10^{-6}$		4.11E-1	2.16E-1	2.99E-1	3.19E-1	2.42E-1	2.30E-1	1.72E+0	1.46E-1
Xe-133m $3 \times 10^{-6}$		6.27E-2	3.15E-2	3.65E-2	4.75E-2	3.42E-2	3.08E-2	2.43E-1	2.07E-2
Ar-41 $3 \times 10^{-6}$		1.80E-4	6.97E-4	4.22E-5	3.29E-5	2.02E-5	6.05E-5	1.03E-3	8.78E-5
Sr-89 $3 \times 10^{-7}$		*	*	*	*	*	*		
Sr-90 $3 \times 10^{-4}$		*	*	*	*	*	*		
C-14 $3 \times 10^{-4}$		2.38E-4	3.36E-4	2.92E-4	1.99E-3	1.87E-3	1.30E-3	6.03E-3	5.12E-4
8. Percent of 10CFR20	Percent	9.87E-1	2.33E+0	7.59E-1	1.03E+0	5.85E-1	2.78E-1		
II. AIRBORNE RELEASES									
1. Total Noble Gases	Curies	2.92E+2	2.32E+3	1.60E+3	1.09E+3	1.51E+3	9.29E+2	7.74E+3	6.58E+2
2. Total Halogens	Curies	2.64E-3	2.95E-2	3.80E-3	2.47E-3	1.34E-3	2.98E-3	4.27E-2	3.63E-3
3. Total Particulate Gross Radioactivity (By)	Curies	1.19E-4	6.10E-4	2.82E-4	3.76E-5	1.09E-4	1.87E-4	1.34E-3	1.14E-4
4. Total Tritium	Curies	5.75E+0	4.15E+1	7.33E+0	5.80E+0	4.41E+0	4.59E+0	6.94E+1	5.90E+0
5. Total Particulate Gross Alpha Radioactivity	Curies	1.59E-6	3.99E-6	3.41E-6	9.84E-7	5.87E-6	8.20E-6	2.40E-5	2.04E-6
6. Maximum Noble Gas Release Rate	$\mu\text{Ci}/\text{sec}$	1.87E+2	7.14E+4	2.80E+2	1.54E+5	2.07E+4	7.03E+2		
7. Percent of Applicable Limit for Technical Specifications									
(a) Noble Gases	Percent	1.86E-1	1.69E+0	1.10E+0	7.61E-1	1.01E+0	6.33E-1		
(b) Halogens	Percent	2.15E-2	2.97E-1	2.77E-2	2.38E-2	1.14E-2	2.47E-2		
(c) Particulates	Percent	2.21E-3	3.51E-3	2.03E-3	1.17E-3	1.39E-3	2.43E-3		
8. Isotopes Released:	Curies								
(a) Particulates									
Cs-134		1.66E-5	4.36E-5	4.41E-5	2.15E-5	2.03E-5	4.00E-5	1.86E-4	1.58E-5
Cr-51		*	*	*	*	*	*		
Cs-137		7.21E-5	9.09E-5	8.07E-5	3.87E-5	3.10E-5	7.25E-5	3.86E-4	3.28E-5
Cs-138		*	4.19E-4	1.65E-4	*	4.10E-5	1.15E-4	7.40E-4	6.29E-5
Co-58		2.50E-5	5.63E-5	4.15E-6	1.02E-5	1.56E-5	1.98E-5	1.31E-4	1.11E-5
Co-60		8.34E-5	8.92E-5	5.09E-5	2.98E-5	5.57E-5	7.68E-5	3.86E-4	3.28E-5
Mn-54		1.31E-7	2.02E-6	9.34E-8	4.98E-7	1.13E-6	3.10E-7	4.18E-6	3.56E-7
Fe-59		*	*	*	*	*	*		
Rb-88		7.06E-5	1.05E-3	1.38E-3	5.51E-5	4.64E-4	1.25E-3	4.27E-3	3.63E-4

FACILITY: Surry Power Station

## REPORT OF RADIOACTIVE EFFLUENTS

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YEAR 1982

DOCKET: 50-280 and 50-281

## II. AIRBORNE RELEASES (CONT'D.)

	UNITS	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	TOTAL	+ Error
8. Isotopes Released (con't.)	CURIES								
(a) Particulates (con't.)									
Nb-95		*	5.83E-7	*	1.43E-8	1.86E-7	*	7.83E-7	6.66E-8
Zn-65		*	2.34E-7	*	*	1.72E-7	*	4.06E-7	3.45E-8
Zr-95		*	2.07E-8	*	*	*	*	2.07E-8	1.76E-9
Ru-103		*	*	1.63E-6	*	*	*	1.63E-6	1.39E-7
(b) Halogens									
I-131		1.92E-3	2.39E-2	2.47E-3	2.05E-3	1.02E-3	2.13E-3	3.35E-2	2.85E-3
I-132		*	1.84E-3	*	*	*	*	1.84E-3	1.56E-4
I-133		7.19E-4	1.93E-3	1.33E-3	4.19E-4	3.15E-4	8.49E-4	5.56E-3	4.73E-4
I-134		*	*	*	*	*	*	*	*
I-135		1.98E-6	1.85E-3	*	*	*	*	1.85E-3	1.57E-4
(c) Gases									
Xe-133		2.88E+2	2.23E+3	1.51E+3	1.03E+3	1.44E+3	9.12E+2	7.41E+3	6.30E+2
Xe-133m		*	4.66E+1	6.20E-1	4.24E+0	6.25E+0	5.24E-1	5.82E+1	4.95E+0
Xe-135		3.54E+0	5.16E+1	8.24E+1	4.49E+1	5.14E+1	1.20E+1	2.46E+2	2.09E+1
Kr-85m		4.41E-2	1.30E+0	4.10E+0	4.85E-1	8.64E+0	2.68E-1	1.48E+1	1.26E+0
Kr-85		*	*	*	*	*	*	*	*
Kr-87		*	3.24E-1	*	*	*	*	3.24E-1	2.75E-2
Kr-88		*	4.58E-1	*	4.70E-1	1.10E-3	2.63E-1	1.19E+0	1.01E-1
Ar-41		*	*	*	*	*	4.03E+0	4.03E+0	3.43E-1
III. SOLID RADIOACTIVE WASTE DISPOSAL									
(a) Total Amount Solid Waste Packaged	Ft <sup>3</sup>	1.84E+4	1.59E+4	8.23E+3	4.67E+3	2.35E+3	4.62E+3	5.42E+4	
(b) Estimated Total Activity	Curies	1.33E+1	6.38E+0	1.27E=1	8.73E+0	4.76E+0	6.34E+2	6.80E+2	
(c) Date of Shipment and Disposition		Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.		
		1-4,7,18,	2-3,23(2),	3-2,9,15,	4-1,6,8,	5-4,18,	6-3,8,10,		
		20,21,22,	25(2)	19,22,25,	12,13,26,	19,21	16,22,24		
		26,28(2)	Richland,	29	28,29		Richland,		
		Richland,	Wash.	Richland,			Wash.		
		Wash.	2-1,2,5,	Wash.			6-21,25		
		1-5(2)7(2),	8,9,10,11,	3-16,19,					
		8(2)11,12,	12,18,22,						
		(3),13,14,	23,26						
		15							

## REPORT OF RADIOACTIVE EFFLUENTS

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Facility: Surry Power StationDOCKET: 50-280 and 50-281YEAR: 1982

## 1. LIQUID RELEASES

	UNITS	July	August	September	October	November	December	TOTAL	Error
1. Gross Radioactivity (Bq)									
(a) Total Release	Curies	2.61E-1	2.51E-1	3.81E-1	3.21E-1	4.16E-1	5.21E-1		
(b) Avg. Concentration Released	µCi/ml	1.06E-9	9.88E-10	1.53E-9	1.41E-9	1.76E-9	2.31E-9		
(c) Maximum Concentration Released	µCi/ml	1.56E-9	1.66E-9	2.17E-9	2.11E-9	2.69E-9	2.80E-9		
2. Tritium									
(a) Total Released	Curies	6.85E+1	9.33E+1	9.16E+1	7.68E+1	8.91E+1	7.96E+1	4.99E+2	4.24E+1
(b) Avg. Concentration Released	µCi/ml	2.80E-7	3.67E-7	3.68E-7	3.37E-7	3.78E-7	3.52E-7		
3. Dissolved Noble Gases									
(a) Total Release	Curies	4.72E+0	2.96E+0	4.76E+0	1.41E+0	2.94E+0	1.43E+0	1.82E+1	1.55E+0
(b) Avg. Concentration Released	µCi/ml	1.93E-8	1.17E-8	1.91E-8	6.18E-9	1.25E-8	6.33E-9		
4. Gross Alpha Radioactivity									
(a) Total Released	Curies	2.05E-6	*	3.38E-6	4.61E-6	3.04E-6	*	1.31E-5	1.11E-6
(b) Avg. Concentration Released	µCi/ml	8.38E-15	*	1.36E-14	2.02E-14	1.29E-14	*		
5. Vol. of Liquid to Disch. Canal	Liters	5.05E+7	6.85E+7	4.78E+7	5.53E+7	4.09E+7	3.73E+7	3.00E+8	1.05E+7
6. Vol. of Dilution Water	Liters	2.45E+11	2.54E+11	2.49E+11	2.28E+11	2.36E+11	2.26E+11	1.44E+12	5.03E+10
7. Isotopes Released MPC µCi/ml	Curies								
I-131 3 x 10 <sup>-7</sup>		7.81E-2	5.61E-2	8.13E-2	1.64E-1	9.16E-2	2.74E-1	7.45E-1	6.33E-2
I-132 8 x 10 <sup>-6</sup>		*	*	5.06E-5	2.16E-4	9.42E-5	*	3.61E-4	3.07E-5
I-133 1 x 10 <sup>-6</sup>		1.02E-2	6.56E-3	8.58E-3	1.77E-2	1.36E-2	8.76E-3	6.54E-2	5.56E-3
I-134 2 x 10 <sup>-5</sup>		*	*	*	*	*	*		
I-135 4 x 10 <sup>-6</sup>		3.67E-4	2.36E-4	6.04E-4	1.69E-3	1.74E-3	2.71E-4	4.91E-3	4.17E-4
Cs-134 9 x 10 <sup>-6</sup>		8.77E-2	8.66E-2	8.80E-2	1.39E-1	1.44E-1	1.40E-1	6.85E-1	5.83E-2
Cs-136 6 x 10 <sup>-5</sup>		6.92E-6	4.20E-4	8.46E-4	6.82E-4	1.15E-3	3.49E-4	3.45E-3	2.94E-4
Cs-137 2 x 10 <sup>-5</sup>		1.44E-1	1.40E-1	1.36E-1	2.06E-1	2.09E-1	1.82E-1	1.02E+0	8.64E-2
Kr-85 3 x 10 <sup>-6</sup>		*	*	*	*	*	*		
Co-57 4 x 10 <sup>-4</sup>		4.48E-5	7.19E-5	*	2.04E-5	1.95E-5	7.29E-5	2.30E-4	1.95E-5
Co-58 9 x 10 <sup>-5</sup>		3.32E-2	2.69E-2	2.24E-2	5.34E-2	1.35E-2	1.75E-1	3.24E-1	2.76E-2
Co-60 3 x 10 <sup>-5</sup>		1.01E-1	1.01E-1	4.54E-2	1.04E-1	6.11E-2	6.41E-2	4.77E-1	4.05E-2
Mn-54 1 x 10 <sup>-4</sup>		2.64E-3	3.60E-3	3.59E-3	1.95E-3	1.02E-3	1.71E-3	1.45E-2	1.23E-3
Na-24 3 x 10 <sup>-5</sup>		4.36E-4	1.13E-3	1.83E-3	1.44E-3	9.12E-5	9.47E-4	5.87E-3	4.99E-4
Cr-51 2 x 10 <sup>-3</sup>		2.62E-3	4.04E-5	1.32E-3	1.71E-2	1.64E-3	2.61E-2	4.88E-2	4.15E-3
Fe-59 5 x 10 <sup>-5</sup>		5.68E-5	*	*	1.17E-4	*	5.21E-4	6.95E-4	5.91E-5
Nb-95 1 x 10 <sup>-4</sup>		1.18E-3	9.31E-4	1.96E-4	8.50E-4	4.19E-4	1.94E-3	5.52E-3	4.69E-4
Ba-La-140 2 x 10 <sup>-5</sup>		*	*	*	4.36E-4	2.06E-5	2.42E-3	2.88E-3	2.45E-4
Rb-88 -		5.60E-3	1.60E-2	3.69E-2	*	*	*	5.85E-2	4.97E-3
Sb-124 2 x 10 <sup>-5</sup>		8.47E-4	1.39E-5	3.88E-5	8.51E-3	3.32E-3	2.67E-2	3.94E-2	3.35E-3
Sb-125 1 x 10 <sup>-4</sup>		3.37E-3	5.44E-4	1.09E-3	1.28E-2	7.25E-3	1.66E-2	4.17E-2	3.34E-3

## REPORT OF RADIOACTIVE EFFLUENTS

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FACILITY: Surry Power Station

DOCKET: 50-280 and 50-281

YEAR: 1982

## I. LIQUID RELEASES (CON'T)

	UNITS	July	August	September	October	November	December	TOTAL	± Error
7. Isotopes Released MPC $\mu\text{Ci}/\text{ml}$	Curies								
Ce-141 $9 \times 10^{-5}$		*	*	*	9.29E-5	5.82E-5	*	1.51E-4	1.28E-5
Ce-144 $1 \times 10^{-5}$		6.20E-4	3.09E-3	5.49E-4	2.25E-4	1.00E-4	*	4.58E-3	3.90E-4
Xe-131m $3 \times 10^{-6}$		4.31E-2	3.14E-3	1.70E-2	3.20E-2	2.89E-2	6.45E-3	1.31E-1	1.11E-2
Xe-133 $3 \times 10^{-6}$		4.41E+0	2.53E+0	4.03E+0	1.20E+0	2.80E+0	1.35E+0	1.63E+1	1.39E+0
X3-135 $3 \times 10^{-6}$		1.69E-1	3.49E-1	5.80E-1	1.60E-1	8.51E-2	6.14E-2	1.40E+0	1.19E-1
Xe-133m $3 \times 10^{-6}$		8.58E-2	4.75E-2	8.44E-2	1.64E-2	2.69E-2	6.34E-3	2.66E-1	2.26E-2
Ar-41 $3 \times 10^{-6}$		3.08E-6	5.88E-6	3.11E-5	*	*	1.23E-5	5.24E-5	4.45E-6
Sr-89 $3 \times 10^{-6}$		*	*	*	*	*	*	*	*
Sr-90 $3 \times 10^{-7}$		*	*	*	*	*	*	*	*
C-14 $8 \times 10^{-4}$		1.95E-4	2.32E-4	5.35E-4	2.16E-4	2.12E-4	3.47E-4	1.74E-3	1.48E-4
8. Percent of 10CFR20	Percent	7.60E-1	4.69E-1	7.51E-1	4.67E-1	5.64E-1	6.31E-1		
II. AIRBORNE RELEASES									
1. Total Noble Gases	Curies	7.96E+2	6.01E+2	7.57E+2	4.32E+3	2.20E+3	4.72E+3	1.34E+4	1.14E+3
2. Total Halogens	Curies	2.37E-3	5.66E-3	1.31E-3	8.13E-3	3.99E-3	8.42E-3	2.99E-2	2.54E-3
3. Total Particulate Gross Radioactivity (By)	Curies	1.86E-4	2.78E-4	1.24E-4	2.39E-4	1.26E-4	1.69E-4	1.12E-3	9.54E-5
4. Total Tritium	Curies	2.72E+0	1.20E+0	1.62E+0	2.28E+0	3.02E+0	4.67E+0	1.55E+1	1.32E+0
5. Total Particulate Gross Alpha Radioactivity	Curies	6.85E-6	4.77E-6	6.82E-6	1.65E-5	8.85E-6	1.21E-5	5.59E-5	4.75E-6
6. Maximum Noble Gas Release Rate	$\mu\text{Ci}/\text{sec.}$	5.96E+2	8.77E+4	2.44E+4	4.48E+4	1.79E+4	4.53E+4		
7. Percent of Applicable Limit for Technical Specifications									
(a) Noble Gases	Percent	5.59E-1	4.06E-1	5.55E-1	2.72E+0	1.48E+0	3.08E+0		
(b) Halogens	Percent	2.04E-2	3.73E-2	1.00E-2	7.22E-2	3.39E-2	9.17E-2		
(c) Particulates	Percent	2.51E-3	3.90E-3	2.76E-3	2.98E-3	2.69E-3	3.26E-3		
8. Isotopes Released:	Curies								
(a) Particulates									
Cs-134		5.91E-5	1.01E-4	8.04E-5	7.31E-5	4.25E-5	9.22E-5	4.48E-4	3.81E-5
Cr-51		*	*	*	*	*	*		
Cs-137		1.07E-4	1.96E-4	1.01E-4	1.36E-4	9.62E-5	1.35E-4	7.71E-4	6.56E-5
Cs-138		*	*	*	*	*	*		
Co-58		2.76E-7	6.08E-6	3.49E-7	6.15E-6	6.45E-7	1.34E-5	2.69E-5	2.29E-6
Co-60		5.73E-5	4.45E-5	5.59E-5	5.05E-5	9.18E-5	5.00E-5	3.50E-4	2.98E-5
Mn-54		1.19E-7	3.94E-8	2.51E-7	4.45E-7	5.62E-7	8.93E-8	1.51E-6	1.28E-7
Fe-59		*	*	*	*	*	*		
Rb-88		1.19E-3	2.56E-3	6.74E-4	3.02E-4	1.11E-4	4.57E-4	5.29E-3	4.50E-4

YEAR 1982

DOCKET: 50-280 and 50-281

## II. AIRBORNE RELEASES (CONT'D.)

	UNITS	July	August	September	October	November	December	TOTAL	± Error
8. Isotopes Released (con't.)	CURIES								
(a) Particulates (con't.)									
Nb-95		*	*	*	*	*	*		
Zn-65		*	*	*	*	*	*		
Zr-95		*	*	*	*	*	*		
Ru-103		*	*	*	*	*	*		
(b) Halogens									
I-131		1.82E-3	3.33E-3	8.63E-4	6.44E-3	2.92E-3	8.18E-3	2.36E-2	2.00E-3
I-132		*	*	*	8.93E-4	*	*	8.93E-4	7.59E-5
I-133		5.44E-4	2.33E-3	4.44E-4	7.98E-4	1.07E-3	*	5.19E-3	4.41E-4
I-134		*	*	*	*	*	*		
I-135		3.67E-6	*	*	*	*	*	3.67E-6	3.12E-7
(c) Gases									
Xe-133		7.40E+2	5.79E+2	7.08E+2	4.17E+3	2.15E+3	4.59E+3	1.29E+4	1.10E+3
Xe-133m		3.98E+0	2.04E+0	1.70E+0	2.98E+1	*	9.37E+0	4.69E+1	3.99E+0
Xe-135		5.15E+1	1.92E+1	4.39E+1	3.41E+1	4.94E+1	1.14E+2	3.12E+2	2.65E+1
Kr-85m		2.96E-1	8.65E-1	9.41E-1	8.50E-1	*	2.98E-1	3.25E+0	2.76E-1
Kr-85		*	*	1.29E+0	6.10E+1	*	4.51E+0	6.68E+1	5.68E+0
Kr-87		*	1.47E-4	*	*	*	*	1.47E-4	1.25E-5
Kr-88		*	7.35E-1	1.09E+0	2.30E-1	*	1.42E-1	2.20E+0	1.87E-1
Ar-41		*	*	*	*	*	*		
III. SOLID RADIOACTIVE WASTE DISPOSAL									
(a) Total Amount Solid Waste Packaged	Ft <sup>3</sup>	3.57E+3	3.22E+3	2.95E+3	5.27E+3	4.11E+3	3.63E+3		
(b) Estimated Total Activity	Curies	2.40E+1	2.13E+2	3.70E+0	4.08E+1	1.50E+1	1.21E+1		
(c) Date of Shipment and Disposition		Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.	Barnwell, S.C.		
		7-1-82	8-10-82	9-15-82	10-1-82	11-2-82	12-6-82		
		7-6-82	8-17-82	9-16-82	10-5-82	11-4-82	12-8-82		
		7-7-82	8-27-82	9-23-82	10-6-82	11-9-82	12-10-82		
		7-12-82	8-30-82(2)	9-29-82	10-7-82	11-15-82	12-13-82		
		7-14-82			10-12-82	11-16-82	12-16-82		
		7-15-82			10-15-82	11-17-82	12-20-82		
		7-22-82			10-19-82(2)	11-19-82	12-21-82		
		7-26-82			10-20-82	11-22-82	12-22-82		
					10-21-82	11-24-82			
					10-27-82(3)				