

UCONNEE NUCLEAR STATION  
 RADIOACTIVE EFFLUENT RELEASES  
 DATE : 03/16/84

I. LIQUID RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	YEAR : 1983 TOTAL
1. GROSS RADIOACTIVITY						
A. TOTAL RELEASE	CURIES	3.38E-02	7.90E-02	7.00E-01	6.15E-01	1.43E+0
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.17E-10	2.26E-10	4.04E-09	3.72E-09	1.46E-0
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	5.02E-09	9.19E-09	8.14E-08	7.25E-08	3.94E-0
2. TRITIUM						
A. TOTAL RELEASE	CURIES	3.15E+02	3.94E+02	2.86E+02	2.85E+02	1.28E+0
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.08E-06	1.13E-06	1.65E-06	1.72E-06	1.31E-0
3. DISSOLVED NOBLE GASES						
A. TOTAL RELEASE	CURIES	1.00E+00	1.26E+00	4.02E+00	1.10E+00	7.38E+0
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	3.45E-09	3.61E-09	2.32E-08	6.65E-09	7.55E-0
4. GROSS ALPHA ACTIVITY						
A. TOTAL RELEASE	CURIES	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL	LITERS	1.87E+07	1.13E+07	1.33E+07	1.28E+07	5.61E+0
6. VOLUME OF DILUTION WATER	LITERS	2.90E+11	3.50E+11	1.73E+11	1.65E+11	9.79E+1
7. RADIONUCLIDES RELEASED	CURIES					
F-18		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
NA-24		0.00E+00	0.00E+00	1.44E-04	0.00E+00	1.44E-0
AR-41		0.00E+00	0.00E+00	3.32E-04	1.14E-04	4.46E-0
CR-51		4.53E-04	2.60E-03	3.07E-02	1.53E-02	4.90E-0
MN-54		1.76E-04	4.46E-04	7.15E-03	6.05E-03	1.38E-0
MN-56		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
CO-57		5.60E-06	0.00E+00	4.70E-04	6.05E-04	1.08E-0
CO-58		1.26E-03	3.70E-02	3.50E-01	3.34E-01	7.22E-0
CO-60		2.75E-03	2.73E-03	2.34E-02	2.04E-02	4.93E-0
FE-59		0.00E+00	1.10E-05	3.43E-03	8.37E-04	4.28E-0
NI-65		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
Zn-65		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
KR-85		3.63E-02	7.87E-02	2.63E-01	2.21E-01	5.99E-0
KR-85M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
KR-87		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
KR-88		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
Y-88		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
Y-92		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+0
SR-89		0.00E+00	2.05E-04	1.60E-04	3.11E-04	6.76E-04
SR-90		0.00E+00	5.12E-05	1.55E-04	2.29E-04	4.35E-04
SR-91		7.00E-06	7.51E-06	0.00E+00	0.00E+00	1.45E-05
SR-92		1.83E-04	3.11E-04	3.37E-02	1.61E-02	5.03E-02
NB-95		6.06E-06	1.53E-04	8.11E-03	6.72E-03	1.50E-02
NB-97		2.31E-03	2.99E-03	6.84E-02	6.56E-02	1.39E-01
ZR-95		0.00E+00	2.59E-05	6.26E-04	9.87E-04	1.64E-03
ZR-97		1.37E-05	8.11E-06	3.24E-03	1.57E-03	4.84E-03
MO-99		2.54E-04	2.24E-04	2.93E-04	5.98E-04	1.37E-03
TC-99M		0.00E+00	0.00E+00	2.50E-04	5.85E-04	2.56E-04
RU-103		0.00E+00	0.00E+00	1.88E-04	0.00E+00	1.88E-04
RU-103M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RU-106		4.82E-04	6.06E-04	1.31E-02	7.10E-03	2.13E-02
AG-108M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
AG-110M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CD-109		6.16E-04	7.95E-04	6.96E-02	3.51E-02	1.04E-01
CD-115		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CD-115M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
IN-115M		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-122		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-124		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SB-125		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SN-123M		2.20E-05	2.40E-05	1.48E-03	5.21E-06	1.53E-03
SN-125		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132		2.49E-03	1.81E-03	4.94E-03	1.11E-02	2.04E-02
I-133		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134		4.46E-04	4.13E-05	3.39E-04	4.24E-04	1.25E-03
I-135		2.76E-04	2.18E-04	0.00E+00	4.27E-04	9.21E-04
XE-131M		8.20E-05	0.00E+00	3.75E-05	0.00E+00	1.19E-04
XE-133		1.08E-02	2.30E-02	6.87E-02	1.81E-02	1.21E-01
XE-133M		9.42E-01	1.15E+00	3.63E+00	8.46E-01	6.56E+00
XE-135		8.13E-03	1.09E-02	3.70E-02	6.15E-03	6.21E-02
CE-134		2.24E-03	3.85E-03	2.83E-02	5.84E-03	4.02E-02
CE-141		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CE-144		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-134		3.70E-04	4.65E-04	5.46E-04	1.04E-03	2.42E-03
CS-135M		6.77E-03	8.24E-03	2.15E-02	2.43E-02	6.08E-02
CS-136		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CS-137		1.19E-05	1.18E-05	1.31E-03	4.68E-06	1.34E-03
CS-138		1.47E-02	1.97E-02	4.88E-02	6.29E-02	1.46E-01
BA-139		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BA-LA-140		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U-187		1.13E-04	2.61E-04	6.18E-03	3.03E-03	9.57E-03
MP-239		7.38E-05	1.09E-04	1.41E-03	4.88E-05	1.64E-03
		1.50E-05	2.17E-05	8.43E-06	0.00E+00	4.51E-05

8. PERCENT OF TECHNICAL SPECIFICATIONS  
 LIMIT (15 CI) FOR TOTAL GROSS ACTIVITY  
 RELEASED

2.26E-01      5.27E-01      4.66E+00      4.10E+00      9.52E+00

B50 5230026 B40322  
 PDR ADOCK 05000269  
 R PDR

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OCONEE NUCLEAR STATION  
RADIOACTIVE EFFLUENT RELEASES

DATE: 03/06/84

II. AIRBORNE RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL	YEAR: 1983
1. TOTAL NOBLE GASES	CURIES	5.04E+03	7.49E+03	6.20E+03	5.31E+03	2.40E+04	
2. TOTAL HALOGENS	CURIES	2.40E-02	3.63E-02	1.63E-02	1.99E-02	9.65E-02	
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	1.20E-03	1.84E-03	4.06E-03	9.89E-03	1.70E-02	
4. TOTAL TRITIUM	CURIES	1.86E-04	9.51E+00	1.76E+00	1.38E+00	1.26E+01	
5. TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
6. MAXIMUM NOBLE GAS RELEASE RATE	UCI/SEC	1.60E+03	1.60E+03	1.60E+03	1.60E+03	1.60E+03	
7. PERCENT OF APPLICABLE LIMIT FOR:							
A. NOBLE GASES	%	9.88E+00	1.47E+01	1.22E+01	1.04E+01	4.71E+01	
B. HALOGENS	%	6.32E+00	9.55E+00	4.29E+00	5.24E+00	2.54E+01	
C. PARTICULATES	%	1.09E-01	1.67E-01	3.69E-01	8.99E-01	1.54E+00	
8. RADIONUCLIDES RELEASED	CURIES						
PARTICULATES							
CR-51		2.63E-07	5.35E-05	7.77E-05	9.13E-05	2.23E-04	
MN-54		1.03E-06	1.04E-06	1.84E-05	3.08E-05	5.13E-05	
FE-59		5.49E-08	2.36E-06	4.66E-06	1.62E-06	8.70E-06	
CO-58		1.31E-05	3.68E-04	1.53E-03	2.18E-03	4.09E-03	
CO-60		2.70E-04	4.14E-04	6.09E-04	4.16E-04	1.71E-03	
ZN-65		6.82E-08	3.52E-06	4.35E-06	7.68E-06	1.56E-05	
SR-89		2.12E-09	1.90E-08	1.73E-09	1.06E-09	2.39E-08	
SR-90		2.51E-10	4.52E-09	7.78E-10	4.02E-10	5.95E-09	
ZR-95		5.27E-08	1.12E-06	1.80E-06	4.47E-07	3.42E-06	
NB-95		3.07E-08	1.02E-06	1.06E-05	4.85E-06	1.65E-05	
MO-99		2.43E-07	5.17E-05	5.80E-05	6.72E-05	1.77E-04	

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RADIOACTIVE EFFLUENT RELEASES

DATE: 03/06/84

II. AIRBORNE RELEASES  
(Continued)

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	TOTAL	YEAR: 1983
RU-103		2.98E-08	3.81E-08	5.26E-07	2.22E-08	6.16E-07	
RU-106		2.97E-07	6.16E-05	8.05E-05	9.52E-05	2.38E-04	
AG-110M		3.17E-08	3.90E-08	6.32E-05	7.50E-05	1.38E-04	
SB-125		9.25E-08	6.37E-06	8.58E-06	7.82E-06	2.29E-05	
CS-134		1.61E-04	1.15E-04	4.05E-04	2.33E-04	9.13E-04	
CS-136		7.03E-06	3.91E-08	4.72E-06	4.13E-06	1.59E-05	
CS-137		7.42E-04	6.97E-04	1.09E-03	6.56E-03	9.09E-03	
BA-140		1.25E-07	2.07E-05	3.50E-05	3.35E-05	8.93E-05	
CE-144		2.21E-07	4.36E-05	6.04E-05	6.37E-05	1.68E-04	
HALOGENS							
I-131		1.98E-02	2.74E-02	1.39E-02	7.09E-03	6.82E-02	
I-133		2.58E-03	6.68E-03	1.32E-03	7.12E-03	1.77E-02	
I-135		1.58E-03	2.19E-03	1.11E-03	5.67E-09	5.45E-03	
GASES							
KR-85M		7.39E+01	1.57E+00	1.36E+01	0.00E+00	8.91E+01	
KR-85		4.85E+01	2.32E+02	6.49E+01	6.99E+02	1.04E+03	
KR-87		0.00E+00	0.00E+00	0.00E+00	2.03E+01	2.03E+01	
KR-88		0.00E+00	0.00E+00	6.18E+00	0.00E+00	6.18E+00	
XE-131M		8.71E+01	9.03E+01	5.49E+01	2.11E+02	4.43E+02	
XE-133M		1.47E+01	3.03E+01	4.13E+01	9.36E+00	9.56E+01	
XE-133		4.82E+03	7.10E+03	5.82E+03	4.37E+03	2.21E+04	
XE-135M		6.87E-02	0.00E+00	0.00E+00	0.00E+00	6.87E-02	
XE-135		1.23E+00	4.66E+01	2.03E+02	1.13E+00	2.52E+02	
AR-41		0.00E+00	0.00E+00	3.21E-03	0.00E+00	3.21E-03	

OCONEE NUCLEAR STATION - 1983  
 RADIOACTIVE EFFLUENT RELEASES  
 SOLID WASTES  
 ANNUAL REPORT

Total volume of solid waste packaged (cubic feet) 40,833.5 for 1983. Total estimated activity involved (curies) 2,842.981 for 1983.

Disposal of materials shipped off-site: All 126 shipments were made to Chem-Nuclear Systems waste disposal facility at Barnwell, South Carolina.

<u>DATE</u>	<u>CUBIC FEET</u>	<u># OF CURIES</u>
07/12/83	200	.033
07/14/83	791.5	.828
07/15/83	200	.033
07/28/83	882	2.78
08/04/83	886	.818
08/11/83	882	2.5
08/18/83	195	36.6
08/25/83	736	1.05
08/30/83	200	.453
09/01/83	200	.889
09/02/83	60	13.8
09/06/83	200	.914
09/08/83	810	.820
09/09/83	200	.91
09/09/83	121	10.892
09/15/83	200	.010
09/15/83	60	25.035
09/28/83	130	13.576
09/29/83	838	1.51
10/06/83	642	.786
10/10/83	200	5.09
10/20/83	810	.621
10/24/83	200	6.78
10/25/83	810	.80
10/25/83	13	57.2
10/26/83	200	9.99
11/02/83	60	12.289
11/02/83	99	3.59

<u>DATE</u>	<u>CUBIC FEET</u>	<u># OF CURIES</u>
11/03/83	810	1.09
11/08/83	200	.014
11/10/83	200	.018
11/14/83	200	.98
11/16/83	200	.979
11/17/83	810	1.04
11/22/83	200	.966
11/22/83	810	.386
11/28/83	120.6	34.8
11/29/83	200	.966
12/01/83	810	.823
12/01/83	116	17.67
12/06/83	200	1.69
12/07/83	200	.03
12/08/83	60	14.33
12/09/83	200	.03
12/12/83	121	.094
12/13/83	200	1.13
12/14/83	200	1.13
12/15/83	810	.679
12/19/83	200	.679
12/19/83	200	.017
12/20/83	120.6	36.536
12/21/83	200	.013
12/21/83	200	.697
12/22/83	<u>810</u>	<u>.84</u>
TOTALS	19,223.7	328.251