

DCOMER T10A
RADIOACTIVE RELEASES

DATE : 12/17/81

1. LIQUID RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	YEAR : 1980 TOTAL
1. GROSS RADIOACTIVITY						
A. TOTAL RELEASE	CURIES	3.04E-01	3.36E-01	3.95E-01	5.07E-01	1.54E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/NL	7.62E-10	7.86E-10	2.13E-09	6.27E-09	1.41E-09
C. MAXIMUM CONCENTRATION RELEASED	UCI/NL	4.01E-08	5.88E-08	1.13E-07	9.52E-08	6.96E-08
2. TRITIUM						
A. TOTAL RELEASE	CURIES	1.63E+02	1.68E+02	2.50E+02	1.31E+02	7.12E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/NL	4.05E-07	3.93E-07	1.35E-06	1.42E-06	6.49E-07
3. DISSOLVED NOBLE GASES						
A. TOTAL RELEASE	CURIES	3.50E-01	6.30E-01	1.48E+00	2.14E+00	4.60E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/NL	8.69E-10	1.47E-09	7.98E-09	2.65E-08	4.20E-09
4. GROSS ALPHA ACTIVITY						
A. TOTAL RELEASE	CURIES	0.	0.	0.	0.	0.
B. AVERAGE CONCENTRATION RELEASED	UCI/NL	0.	0.	0.	0.	0.
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL	LITERS	2.51E+07	1.88E+07	1.15E+07	1.75E+07	7.28E+07
6. VOLUME OF DILUTION WATER	LITERS	4.02E+11	4.27E+11	1.85E+11	8.09E+10	1.10E+12
7. RADIONUCLIDES RELEASED	CURIES					

F-18	0.	0.	0.	0.	0.
NA-24	1.44E-04	3.73E-05	7.01E-06	2.04E-04	3.93E-04
AR-41	0.	1.54E-04	2.80E-05	0.	1.82E-04
CR-51	3.71E-03	8.10E-03	1.97E-03	7.56E-04	1.45E-02
MN-54	1.94E-03	1.85E-03	1.17E-03	1.19E-03	6.18E-03
MN-56	0.	0.	0.	0.	0.
CO-57	1.79E-04	1.70E-04	1.93E-05	5.86E-05	4.27E-04
CO-58	5.29E-02	8.53E-02	4.00E-02	1.27E-01	3.05E-01
CO-60	2.84E-02	2.53E-02	1.30E-02	1.44E-02	8.11E-02
FE-59	0.	3.51E-04	2.42E-04	0.	5.93E-04
NI-65	0.	1.20E-03	0.	0.	1.20E-03
ZN-65	2.84E-04	3.57E-04	0.	0.	6.41E-04
KR-85	1.20E-01	1.51E-01	1.35E-01	1.47E-01	5.53E-01
KR-85M	0.	0.	1.02E-03	3.63E-04	1.39E-03
KR-87	0.	0.	0.	0.	0.
KR-88	0.	0.	4.88E-05	0.	4.88E-05
Y-88	0.	0.	0.	0.	0.
Y-92	0.	0.	0.	0.	0.
SR-89	8.96E-03	4.13E-03	2.67E-03	4.02E-03	1.98E-02
SR-90	8.34E-04	9.86E-04	3.00E-04	4.45E-04	2.56E-03
SR-91	6.99E-07	1.58E-05	5.56E-06	6.94E-06	2.90E-05
SR-92	1.49E-03	1.42E-03	2.07E-03	4.89E-04	5.47E-03
NB-95	0.50E-04	1.32E-03	4.83E-04	1.77E-04	2.83E-03
NB-97	1.13E-02	1.23E-02	1.38E-02	4.07E-03	4.16E-02
ZR-95	8.48E-05	2.56E-04	4.85E-05	3.69E-05	4.26E-04
ZR-97	6.89E-05	3.53E-05	1.56E-04	0.	2.60E-04
MO-99	4.65E-04	8.03E-04	2.66E-04	2.19E-04	1.75E-03
TC-99M	2.85E-04	6.58E-04	9.68E-05	3.69E-05	1.08E-03
RU-103	3.55E-04	1.49E-04	0.	0.	5.03E-04
RU-103M	0.	0.	0.	0.	0.
RU-106	2.09E-03	3.37E-03	9.77E-04	9.73E-04	7.41E-03
AG-108M	0.	0.	0.	0.	0.
AG-110M	4.35E-03	4.41E-03	5.99E-03	2.51E-03	1.73E-02
CD-109	0.	0.	0.	0.	0.
CD-115	1.27E-04	3.00E-05	8.44E-06	4.51E-05	2.11E-04
CD-115M	0.	0.	0.	0.	0.
IN-115M	0.	0.	0.	0.	0.
SB-122	0.	0.	0.	0.	0.
SB-124	0.	0.	0.	0.	0.
SB-125	1.56E-03	1.76E-03	6.44E-03	3.76E-05	9.81E-03
SM-123M	0.	0.	0.	0.	0.
SM-125	0.	0.	0.	0.	0.
I-131	4.84E-02	1.53E-02	2.68E-02	7.19E-02	1.62E-01
I-132	7.82E-06	8.22E-06	0.	0.	1.60E-05
I-133	6.19E-03	5.12E-04	6.54E-04	1.43E-03	8.79E-03
I-134	5.79E-03	2.24E-03	2.98E-03	1.38E-03	1.24E-02
I-135	5.84E-04	2.09E-04	4.31E-04	0.	1.22E-03
XE-131M	4.52E-03	6.42E-03	1.96E-02	2.23E-02	5.28E-02
XE-133	2.16E-01	4.66E-01	1.29E+00	1.92E+00	3.89E+00
XE-133M	2.03E-03	4.33E-03	1.48E-02	1.79E-02	3.90E-02
XE-135	6.77E-03	2.17E-03	2.19E-02	3.79E-02	6.88E-02
CE-134	0.	0.	0.	0.	0.
CE-141	0.	0.	0.	0.	0.
CE-144	1.25E-03	9.48E-04	3.58E-04	4.26E-04	2.99E-03
CS-134	4.49E-02	5.14E-02	8.22E-02	9.48E-02	2.73E-01
CS-135M	0.	0.	0.	0.	0.
CS-136	1.06E-03	2.81E-04	7.47E-04	3.42E-03	5.51E-03
CS-137	8.79E-02	1.09E-01	1.82E-01	1.76E-01	5.54E-01
CS-138	1.21E-03	2.32E-05	7.25E-03	0.	8.48E-03
BA-139	0.	0.	0.	0.	0.
BA-LA-140	1.54E-03	1.71E-03	1.76E-03	1.15E-03	6.16E-03
W-187	9.41E-05	2.30E-04	2.11E-04	1.51E-04	6.86E-04
WP-239	5.23E-07	1.43E-05	2.95E-05	2.68E-05	7.12E-05

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

2.04E+00 2.24E+00 2.63E+00 3.38E+00 1.03E+01

8103090285

OCONEE NUCLEAR STATION
RADIOACTIVE EFFLUENT RELEASES

DATE : 02/19/81

I. AIRBORNE RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR	YEAR : 1980 TOTAL
1. TOTAL NOBLE GASES	CURIES	6.35E+03	3.38E+03	3.55E+03	5.92E+03	1.92E+04
2. TOTAL HALOGENS	CURIES	1.60E-02	2.89E-02	3.62E-02	3.88E-02	1.20E-01
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	7.68E-04	2.41E-03	5.60E-03	4.82E-03	1.36E-02
4. TOTAL TRITIUM	CURIES	3.47E+00	3.20E+00	2.29E+00	1.73E+00	1.07E+01
5. TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	0.	0.	0.	0.	0.
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	%	1.25E+01	6.62E+00	6.96E+00	1.16E+01	3.77E+01
B. HALOGENS	%	4.21E+00	7.61E+00	9.53E+00	1.02E+01	3.16E+01
C. PARTICULATES	%	6.98E-02	2.19E-01	5.09E-01	4.39E-01	1.24E+00

8. RADIONUCLIDES RELEASED

PARTICULATES

C-14	0.	0.	0.	0.	0.
P-32	0.	0.	0.	0.	0.
CR-51	1.71E-04	2.19E-04	8.78E-05	1.09E-04	5.87E-04
MN-54	4.54E-06	9.09E-08	7.21E-06	1.01E-06	1.29E-05
FE-55	0.	0.	0.	0.	0.
FE-59	1.95E-06	5.32E-06	3.40E-06	6.05E-06	1.67E-05
CO-58	8.57E-06	8.37E-05	5.47E-05	3.05E-05	1.78E-04
CO-60	1.28E-05	2.08E-04	1.81E-03	2.37E-04	2.27E-03
NI-63	0.	0.	0.	0.	0.
ZN-65	9.38E-06	9.44E-06	1.18E-05	9.79E-06	4.04E-05
RB-86	0.	0.	0.	0.	0.
SR-89	2.84E-09	7.13E-09	0.	7.38E-09	1.74E-08
SR-90	1.86E-09	2.21E-09	1.14E-09	1.67E-10	5.38E-09
Y-91	0.	0.	0.	0.	0.
ZR-95	1.35E-06	3.99E-06	1.19E-06	1.09E-06	7.61E-06
NB-95	3.55E-07	2.00E-06	3.18E-06	4.94E-07	6.03E-06
MO-99	1.23E-04	1.85E-04	6.09E-05	9.35E-05	4.63E-04
RU-103	2.46E-07	1.48E-06	0.	1.44E-08	1.74E-06
RU-106	1.76E-04	2.79E-04	9.16E-05	1.27E-04	6.73E-04
AG-110M	4.07E-06	8.75E-06	6.40E-05	5.63E-05	1.33E-04
CD-115M	0.	0.	0.	0.	0.
SN-123	0.	0.	0.	0.	0.
SN-126	0.	0.	0.	0.	0.
SD-124	0.	0.	0.	0.	0.
SB-125	1.89E-05	2.23E-05	1.06E-05	1.91E-05	7.09E-05
TE-127M	0.	0.	0.	0.	0.
TE-129M	0.	0.	0.	0.	0.
CS-134	2.82E-05	2.08E-04	3.76E-04	3.82E-05	6.51E-04
CS-136	1.26E-06	4.58E-06	1.75E-05	3.91E-06	2.73E-05
CS-137	3.40E-05	9.37E-04	2.93E-03	3.97E-03	7.87E-03
BA-140	6.13E-05	8.91E-05	2.29E-05	4.59E-05	2.19E-04
CE-141	0.	0.	0.	0.	0.
CE-144	1.11E-04	1.42E-04	5.17E-05	7.38E-05	3.79E-04

HALOGENS

I-131	1.19E-02	2.44E-02	3.04E-02	3.15E-02	9.81E-02
I-133	3.11E-03	2.52E-03	3.35E-03	4.77E-03	1.38E-02
I-135	9.52E-04	1.95E-03	2.43E-03	2.52E-03	7.85E-03

GASES

KR-83M	0.	0.	0.	0.	0.
KR-85M	1.12E+01	1.25E+00	1.52E+00	4.25E-01	1.44E+01
KR-85	1.85E+02	2.44E+02	3.79E+00	9.94E+01	5.33E+02
KR-87	5.85E-02	2.41E+00	1.41E-01	1.28E-02	2.62E+00
KR-88	1.06E+00	0.	4.18E-01	1.56E-01	1.63E+00
KR-89	0.	0.	0.	0.	0.
KR-90	0.	0.	0.	0.	0.
XE-131M	7.49E+01	5.98E+01	2.32E+01	4.27E+01	2.81E+02
XE-133M	3.85E+01	2.23E+01	2.79E+01	4.65E+01	1.35E+02
XE-133	5.82E+03	3.01E+03	3.44E+03	5.69E+03	1.80E+04
XE-135M	7.84E-01	0.	2.14E-01	2.96E-02	1.03E+00
XE-135	2.20E+02	4.11E+01	4.47E+01	4.35E+01	3.49E+02
XE-137	0.	0.	0.	0.	0.
XE-138	0.	0.	0.	0.	0.
AR-41	2.74E-01	5.59E-01	1.26E+00	5.82E-02	2.15E+00

PARTICULATES AND HALOGENS

WITH T 1/2 > 8 DAYS

1.25E-02 2.44E-02 3.04E-02 3.15E-02 9.81E-02

RADIOACTIVE EFFLUENT RELEASES
SOLID WASTES

Total volume of solid waste packaged (cubic feet) 66,692.09 for 1980.

Total estimated activity involved (curies) 3,010.4 for 1980.

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

<u>DATE</u>	<u>CUBIC FEET</u>	<u># OF CURIES</u>
7/1/80	47	224.7
7/2/80	208	2.98
7/3/80	753	.481
7/8/80	208	4.24
7/10/80	208	6.95
7/10/80	565.5	.926
7/15/80	208	3.38
7/15/80	5.6	.00000132
7/17/80	447	.237
7/18/80	208	4.15
7/19/80	107.5	.000012
7/22/80	130	1.83
7/23/80	13	5.1
7/23/80	208	1.75
7/25/80	208	6.97
7/29/80	208	3.81
7/31/80	854	4.97
8/6/80	208	1.38
8/7/80	576	.324
8/8/80	208	9.73
8/8/80	70	361.03
8/12/80	208	4.96
8/14/80	547.5	.302
8/15/80	900	.115
8/20/80	208	5.77
8/21/80	450	.33
8/22/80	208	7.29

<u>DATE</u>	<u>CUBIC FEET</u>	<u># OF CURIES</u>
8/26/80	185	6.28
8/28/80	208	7.05
8/28/80	577	2.7
9/2/80	208	3.55
9/3/80	864	.037
9/4/80	208	6.16
9/4/80	747	.53
9/5/80	400	.022
9/8/80	208	4.31
9/11/80	825	.655
9/16/80	208	3.06
9/17/80	208	2.06
9/18/80	548	.34
9/22/80	208	1.89
9/24/80	208	1.47
9/25/80	795	.42
9/26/80	1.5	140
9/26/80	208	2.80
10/2/80	505.5	.450
10/6/80	208	2.11
10/8/80	208	.72
10/9/80	313.5	.189
10/10/80	208	4.79
10/13/80	75	1,335.3
10/14/80	208	1.39
10/16/80	208	1.89
10/20/80	208	1.55
10/22/80	208	1.8
10/23/80	435	.298
10/23/80	75	36.26
10/28/80	208	1.72
10/30/80	609	1.66
10/30/80	208	8.27

<u>DATE</u>	<u>CUBIC FEET</u>	<u># OF CURIES</u>
11/5/80	208	1.44
11/6/80	387	0.27
11/7/80	208	1.68
11/12/80	208	9.04
11/13/80	328.5	.53
11/14/80	80	210.5
11/18/80	208	7.97
11/21/80	633	.224
11/21/80	208	3.2
11/24/80	208	1.81
11/26/80	75	164.8
11/28/80	208	4.52
12/2/80	208	9.03
12/3/80	208	6.52
12/3/80	13	1.7
12/5/80	825	.572
12/8/80	208	12.05
12/10/80	208	5.45
12/11/80	330	.71
12/16/80	208	4.91
12/18/80	208	3.42
12/18/80	687.39	0.27
12/23/80	322	5.49
12/23/80	75	106.44
12/26/80	208	5.54
12/29/80	208	5.21
12/30/80	550	1.74

Totals for the last 6 months
of 1980

26,295.49

2,820.46