

OCONEE NUCLEAR STATION  
 RADIOACTIVE EFFLUENT RELEASES

DATE : 08/13/88

I. LIQUID RELEASES

	UNITS	APRIL	MAY	JUNE	YEAR 1988 SUB-TOTAL
1. GROSS RADIOACTIVITY					
A. TOTAL RELEASE	CURIES	1.52E-01	8.04E-02	1.03E-01	3.34E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	6.65E-10	7.17E-10	1.19E-09	7.04E-10
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	2.18E-12	2.35E-12	3.92E-12	3.09E-12
2. TRITIUM					
A. TOTAL RELEASE	CURIES	2.00E+01	5.02E+01	8.99E+01	1.60E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	1.22E-07	4.48E-07	1.04E-06	3.93E-07
3. DISSOLVED NODLE GASES					
A. TOTAL RELEASE	CURIES	5.48E-02	3.59E-02	5.39E-01	6.30E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	2.39E-10	3.20E-10	6.24E-09	1.47E-09
4. GROSS ALPHA ACTIVITY					
A. TOTAL RELEASE	CURIES	0.	0.	0.	0.
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	0.	0.	0.	0.
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL	LITERS	5.01E+06	5.48E+06	8.26E+06	1.88E+07
6. VOLUME OF DILUTION WATER	LITERS	2.29E+11	1.12E+11	8.65E+10	4.27E+11
7. RADIONUCLIDES RELEASED	CURIES				
F-18		0.	0.	0.	0.
NA-24		0.	0.	3.73E-05	3.73E-05
AR-41		0.	0.	1.54E-04	1.54E-04
CR-51		1.05E-03	3.36E-03	2.09E-03	8.10E-03
MN-54		5.03E-04	4.51E-04	8.10E-04	1.85E-03
MN-56		0.	0.	0.	0.
CO-57		5.98E-05	6.62E-05	4.42E-05	1.70E-04
CO-58		4.39E-02	1.66E-02	2.28E-02	8.53E-02
CO-60		9.68E-03	8.21E-03	7.41E-03	2.53E-02
FE-59		0.	0.	3.51E-04	3.51E-04
NI-65		1.20E-03	0.	0.	1.20E-03
ZN-65		3.57E-04	0.	0.	3.57E-04
KR-85		4.71E-02	3.13E-02	7.22E-02	1.51E-01
KR-85M		0.	0.	0.	0.
KR-87		0.	0.	0.	0.
KR-88		0.	0.	0.	0.
Y-88		0.	0.	0.	0.
Y-92		0.	0.	0.	0.
SR-89		1.94E-03	9.31E-04	1.24E-03	4.13E-03
SR-90		4.06E-04	2.57E-04	3.22E-04	9.86E-04
SR-91		0.	1.58E-05	0.	1.58E-05
SR-92		3.50E-04	5.83E-04	4.07E-04	1.42E-03
NB-95		1.85E-04	6.76E-04	4.57E-04	1.32E-03
NB-97		3.02E-03	4.67E-03	4.64E-03	1.23E-02
ZR-95		0.	1.92E-04	6.41E-05	2.56E-04
ZR-97		0.	0.	3.53E-05	3.53E-05
MO-99		1.74E-04	2.39E-04	3.90E-04	8.03E-04
TC-99M		0.	0.	6.58E-04	6.58E-04
RU-103		1.49E-04	0.	0.	1.49E-04
RU-103M		0.	0.	0.	0.
RU-106		1.28E-03	1.29E-03	8.00E-04	3.37E-03
AG-108M		0.	0.	0.	0.
AG-110M		1.23E-03	1.64E-03	1.54E-03	4.41E-03
CD-109		0.	0.	0.	0.
CD-115		1.59E-05	1.41E-05	0.	3.00E-05
CD-115M		0.	0.	0.	0.
IN-115M		0.	0.	0.	0.
SB-122		0.	0.	0.	0.
SB-124		0.	0.	0.	0.
SB-125		1.44E-03	1.78E-05	2.99E-04	1.76E-03
SM-123M		0.	0.	0.	0.
SM-125		0.	0.	0.	0.
I-131		2.58E-03	9.07E-04	1.17E-02	1.53E-02
I-132		0.	0.	8.22E-06	8.22E-06
I-133		0.	2.97E-05	4.02E-04	5.12E-04
I-134		1.38E-03	1.13E-04	7.49E-04	2.24E-03
I-135		7.19E-05	0.	1.37E-04	2.09E-04
XE-131M		2.15E-03	1.43E-04	4.12E-03	6.42E-03
XE-133		5.59E-03	4.30E-03	4.57E-01	4.66E-01
XE-133M		0.	0.	4.33E-03	4.33E-03
XE-135		0.	8.19E-05	2.09E-03	2.17E-03
CE-134		0.	0.	0.	0.
CE-141		0.	0.	0.	0.
CE-144		2.79E-04	2.34E-04	4.35E-04	9.48E-04
CS-134		2.83E-02	1.12E-02	1.19E-02	5.14E-02
CS-135M		0.	0.	0.	0.
CS-136		2.24E-04	5.32E-05	3.26E-06	2.81E-04
CS-137		4.91E-02	2.83E-02	3.13E-02	1.09E-01
CS-138		0.	2.32E-05	0.	2.32E-05
BA-139		0.	0.	0.	0.
BA-LA-140		3.00E-04	9.94E-05	1.31E-03	1.71E-03
W-187		1.21E-04	4.00E-05	6.06E-05	2.30E-04
HP-239		1.43E-05	0.	0.	1.43E-05
8. PERCENT OF TECHNICAL SPECIFICATIONS LIMIT (15 CI) FOR TOTAL GROSS ACTIVITY RELEASED		1.01E+00	5.36E-01	6.00E-01	2.24E+00

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OCONEE NUCLEAR STATION  
 RADIOACTIVE EFFLUENT RELEASES

DATE : 09/13/00

I. LIQUID RELEASES

	UNITS	1ST QTR	2ND QTR	YEAR : 1980 SUB-TOTAL
1. GROSS RADIOACTIVITY				
A. TOTAL RELEASE	CURIES	3.06E-01	3.36E-01	6.42E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/HL	7.62E-10	7.06E-10	7.74E-10
C. MAXIMUM CONCENTRATION RELEASED	UCI/HL	2.40E-12	3.00E-12	2.70E-12
2. TRITIUM				
A. TOTAL RELEASE	CURIES	1.63E+02	1.60E+02	3.31E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/HL	4.05E-07	3.93E-07	3.99E-07
3. DISSOLVED NOBLE GASES				
A. TOTAL RELEASE	CURIES	3.50E-01	6.30E-01	9.80E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/HL	8.69E-10	1.47E-09	1.18E-09
4. GROSS ALPHA ACTIVITY				
A. TOTAL RELEASE	CURIES	0.	0.	0.
B. AVERAGE CONCENTRATION RELEASED	UCI/HL	0.	0.	0.
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL	LITERS	2.51E+07	1.00E+07	4.30E+07
6. VOLUME OF DILUTION WATER	LITERS	4.02E+11	4.27E+11	8.30E+11
7. RADIONUCLIDES RELEASED	CURIES			
F-18		0.	0.	0.
NA-24		1.44E-04	3.73E-05	1.82E-04
AR-41		0.	1.54E-04	1.54E-04
CR-51		3.71E-03	0.10E-03	1.10E-02
HM-54		1.96E-03	1.05E-03	3.02E-03
HM-56		0.	0.	0.
CO-57		1.79E-04	1.70E-04	3.50E-04
CO-58		5.29E-02	0.53E-02	1.30E-01
CO-60		2.04E-02	2.53E-02	5.37E-02
FE-59		0.	3.51E-04	3.51E-04
NI-65		0.	1.20E-03	1.20E-03
ZN-65		2.04E-04	3.57E-04	6.41E-04
KR-85		1.20E-01	1.51E-01	2.71E-01
KR-85M		0.	0.	0.
KR-87		0.	0.	0.
KR-88		0.	0.	0.
Y-88		0.	0.	0.
Y-92		0.	0.	0.
SR-89		0.96E-03	4.13E-03	1.31E-02
SR-90		0.34E-04	9.06E-04	1.02E-03
SR-91		6.99E-07	1.58E-05	1.65E-05
SR-92		1.49E-03	1.42E-03	2.91E-03
ND-95		0.50E-04	1.32E-03	2.17E-03
NB-97		1.13E-02	1.23E-02	2.37E-02
ZR-95		0.40E-05	2.56E-04	3.41E-04
ZR-97		6.09E-05	3.53E-05	1.04E-04
MO-99		4.65E-04	0.03E-04	1.27E-03
TC-99M		2.85E-04	6.50E-04	9.44E-04
RU-103		3.55E-04	1.49E-04	5.03E-04
RU-103M		0.	0.	0.
RU-106		2.09E-03	3.37E-03	5.46E-03
AG-108M		0.	0.	0.
AG-110M		4.35E-03	4.41E-03	8.76E-03
CB-109		0.	0.	0.
CB-113		1.27E-04	3.00E-05	1.57E-04
CB-115M		0.	0.	0.
IN-115M		0.	0.	0.
SB-122		0.	0.	0.
SB-124		0.	0.	0.
SB-125		1.56E-03	1.76E-03	3.33E-03
SN-123M		0.	0.	0.
SN-125		0.	0.	0.
I-131		4.04E-02	1.53E-02	6.37E-02
I-132		7.02E-06	0.22E-06	1.60E-05
I-133		6.19E-03	5.12E-04	6.71E-03
I-134		5.79E-03	2.24E-03	8.03E-03
I-135		5.04E-04	2.09E-04	7.94E-04
XE-131M		4.52E-03	6.42E-03	1.09E-02
XE-133		2.16E-01	4.66E-01	6.82E-01
XE-133M		2.03E-03	4.33E-03	6.36E-03
XE-135		6.77E-03	2.17E-03	8.94E-03
CE-134		0.	0.	0.
CE-141		0.	0.	0.
CE-144		1.25E-03	9.40E-04	2.20E-03
CS-134		4.49E-02	5.14E-02	9.62E-02
CS-135M		0.	0.	0.
CS-136		1.06E-03	2.01E-04	1.35E-03
CS-137		0.79E-02	1.09E-01	1.97E-01
CS-138		1.21E-03	2.32E-05	1.23E-03
BA-139		0.	0.	0.
BA-LA-140		1.54E-03	1.71E-03	3.25E-03
U-107		9.41E-05	2.30E-04	3.24E-04
HP-239		5.23E-07	1.43E-05	1.40E-05
B. PERCENT OF TECHNICAL SPECIFICATIONS LIMIT (15 CI) FOR TOTAL GROSS ACTIVITY RELEASED		2.04E+00	2.24E+00	4.20E+00

OCDNEE NUCLEAR STATION  
RADIOACTIVE EFFLUENT RELEASES

DATE : 08/12/88

II. AIRBORNE RELEASES		UNITS	APRIL	MAY	JUNE	YEAR : 1988 SUB-TOTAL
1.	TOTAL NOBLE GASES	CURIES	5.85E+02	5.57E+02	2.24E+03	3.38E+03
2.	TOTAL HALOGENS	CURIES	1.54E-03	1.67E-03	2.37E-02	2.69E-02
3.	TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	4.00E-04	9.66E-04	1.04E-03	2.41E-03
4.	TOTAL TRITIUM	CURIES	1.67E+00	3.43E-01	1.19E+00	3.20E+00
5.	TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	0.	0.	0.	0.
6.	MAXIMUM NOBLE GAS RELEASE RATE	UCI/SEC	1.60E+03	1.60E+03	1.60E+03	1.60E+03
7.	PERCENT OF APPLICABLE LIMIT FOR :					
	A. NOBLE GASES	I	1.15E+00	1.09E+00	4.38E+00	6.42E+00
	B. HALOGENS	I	4.10E-01	4.40E-01	6.23E+00	7.67E+00
	C. PARTICULATES	I	3.64E-02	0.79E-02	9.48E-02	2.19E-01
8.	RADIONUCLIDES RELEASED	CURIES				
	PARTICULATES					
	C-14		0.	0.	0.	0.
	P-32		0.	0.	0.	0.
	CR-51		0.97E-05	5.24E-05	7.74E-05	2.19E-04
	KM-54		3.57E-09	1.32E-08	7.41E-08	9.09E-08
	FE-55		0.	0.	0.	0.
	FE-59		2.00E-06	2.35E-06	9.68E-07	5.32E-06
	CO-58		5.00E-06	5.19E-05	2.60E-05	8.37E-05
	CO-60		3.08E-06	1.46E-04	5.90E-05	2.08E-04
	NI-63		0.	0.	0.	0.
	ZN-65		3.11E-06	1.29E-06	5.05E-06	7.44E-06
	RB-86		0.	0.	0.	0.
	SR-89		2.91E-09	1.92E-09	2.29E-09	7.13E-09
	SR-90		9.04E-10	5.96E-10	7.12E-10	2.21E-09
	Y-91		0.	0.	0.	0.
	ZR-95		1.06E-06	2.52E-06	4.04E-07	3.99E-06
	NB-95		2.63E-07	1.74E-06	6.05E-10	2.00E-06
	MO-99		7.56E-05	4.53E-05	6.39E-05	1.85E-04
	RU-103		1.46E-06	1.70E-08	5.45E-10	1.48E-06
	RU-106		1.03E-04	7.53E-05	1.00E-04	2.79E-04
	AG-110M		1.06E-06	2.37E-08	6.06E-06	0.75E-06
	CD-115M		0.	0.	0.	0.
	SM-123		0.	0.	0.	0.
	SM-126		0.	0.	0.	0.
	SB-124		0.	0.	0.	0.
	SB-125		0.22E-06	6.69E-06	7.37E-06	2.23E-05
	TE-127M		0.	0.	0.	0.
	TE-129M		0.	0.	0.	0.
	CS-134		2.64E-06	0.01E-05	1.26E-04	2.08E-04
	CS-136		1.00E-06	1.60E-08	3.48E-06	4.58E-06
	CS-137		1.64E-05	4.40E-04	4.81E-04	9.37E-04
	BA-140		3.20E-05	2.36E-05	3.27E-05	1.71E-05
	CE-141		0.	0.	0.	0.
	CE-144		5.23E-05	3.71E-05	5.30E-05	1.42E-04
	HALOGENS					
	I-131		1.52E-03	1.43E-03	2.14E-02	2.44E-02
	I-133		4.32E-05	2.41E-04	2.24E-03	2.52E-03
	BASES					
	KR-03M		0.	0.	0.	0.
	KR-05M		0.	0.	1.25E+00	1.25E+00
	KR-05		4.09E-02	6.27E+01	1.01E+02	2.44E+02
	KR-07		0.	2.33E+00	0.42E-02	2.41E+00
	KR-08		0.	0.	0.	0.
	KR-09		0.	0.	0.	0.
	KR-90		0.	0.	0.	0.
	XE-131M		4.95E+00	3.12E+01	2.37E+01	5.90E+01
	XE-133M		0.	0.	2.23E+01	2.23E+01
	XE-133		5.00E+02	4.56E+02	1.97E+03	3.81E+03
	XE-135M		0.	0.	0.	0.
	XE-135		0.	4.90E+00	3.61E+01	4.11E+01
	XE-137		0.	0.	0.	0.
	XE-138		0.	0.	0.	0.
	AR-41		0.	0.	5.59E-01	5.59E-01

OCONEE NUCLEAR STATION  
RADIOACTIVE EFFLUENT RELEASES

DATE: 08/12/00

II. AIRBORNE RELEASES	UNITS	YEAR: 1980		SUB-TOTAL
		1st QTR	2nd QTR	
1. TOTAL NOBLE GASES	CURIES	6.35E+03	3.38E+03	9.73E+03
2. TOTAL HALOGENS	CURIES	1.50E-02	2.69E-02	4.19E-02
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	7.60E-04	2.41E-03	3.10E-03
4. TOTAL TRITIUM	CURIES	3.47E+00	3.20E+00	6.67E+00
5. TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	0.	0.	0.
6. MAXIMUM NOBLE GAS RELEASE RATE	UCI/SEC	1.60E+03	1.60E+03	1.60E+03
7. PERCENT OF APPLICABLE LIMIT FOR :				
A. NOBLE GASES	X	1.25E+01	6.62E+00	1.91E+01
B. HALOGENS	X	3.95E+00	7.07E+00	1.10E+01
C. PARTICULATES	X	6.98E-02	2.19E-01	2.89E-01
8. RADIONUCLIDES RELEASED	CURIES			
PARTICULATES				
C-14		0.	0.	0.
P-32		0.	0.	0.
CR-51		1.71E-04	2.19E-04	3.90E-04
MN-54		4.54E-06	9.09E-08	4.63E-06
FE-55		0.	0.	0.
FE-59		1.95E-06	5.32E-06	7.26E-06
CO-58		8.57E-06	8.37E-05	9.23E-05
CO-60		1.28E-05	2.08E-04	2.21E-04
NI-63		0.	0.	0.
ZN-65		9.38E-06	9.44E-06	1.88E-05
RB-86		0.	0.	0.
SR-89		2.04E-09	7.13E-09	9.97E-09
SR-90		1.06E-09	2.21E-09	4.07E-09
Y-91		0.	0.	0.
ZR-95		1.35E-06	3.99E-06	5.33E-06
NB-95		3.55E-07	2.00E-06	2.35E-06
MO-99		1.23E-04	1.05E-04	3.00E-04
RU-103		2.46E-07	1.48E-06	1.72E-06
RU-106		1.76E-04	2.79E-04	4.55E-04
AG-110M		4.07E-06	0.75E-06	1.20E-05
CD-115M		0.	0.	0.
SM-123		0.	0.	0.
SN-126		0.	0.	0.
SB-124		0.	0.	0.
SB-125		1.09E-05	2.23E-05	4.12E-05
TE-127M		0.	0.	0.
TE-129M		0.	0.	0.
CS-134		2.02E-05	2.08E-04	2.37E-04
CS-136		1.26E-06	4.58E-06	5.04E-06
CS-137		3.40E-05	9.37E-04	9.71E-04
BA-140		6.13E-05	0.91E-05	1.50E-04
CE-141		0.	0.	0.
CE-144		1.11E-04	1.42E-04	2.33E-04
HALOGENS				
I-131		1.19E-02	2.44E-02	3.63E-02
I-133		3.11E-03	2.52E-03	5.64E-03
GASES				
KR-83M		0.	0.	0.
KR-85M		1.12E+01	1.25E+00	1.25E+01
KR-85		1.05E+02	2.44E+02	4.30E+02
KR-87		5.05E-02	2.41E+00	2.47E+00
KR-88		1.06E+00	0.	1.06E+00
KR-89		0.	0.	0.
KR-90		0.	0.	0.
XE-131M		7.49E+01	5.98E+01	1.35E+02
XE-133M		3.05E+01	2.23E+01	6.09E+01
XE-133		5.02E+03	3.01E+03	8.03E+03
XE-135M		7.04E-01	0.	7.04E-01
XE-135		2.20E+02	4.11E+01	2.61E+02
XE-137		0.	0.	0.
XE-138		0.	0.	0.
AR-41		2.74E-01	5.59E-01	8.32E-01

OCONEE NUCLEAR STATION

Solid Waste Shipped Offsite for Burial or Disposal

Reporting Period - 01-80 to 06-80

<u>Types of Wastes</u>	<u>Number of Shipments</u>	<u>Volume (Cubic Meters)</u>	<u>Total Activity CI</u>
1. Wastes from Liquid Systems			
(A) Powdex Resins	4	36.4	1.79E-01
(B) Spent Resins & Bead Resins	5	48.4	4.18E+00
(C) Evaporator Concentrates	52	483.3	9.85E+01
2. Dry Solid Wastes			
(A) Spent Filters	10	3.3	5.59E+01
(B) Dry Compressible Wastes	20	267.8	1.17E+01
(C) Contaminated Equipment	20	303.8	1.94E+01
(D) Irradiated Components	1	0.9	1.35E-01

SUMMARY OF MAJOR RADIONUCLIDE COMPOSITION

<u>Type of Waste</u>	<u>Radionuclide</u>	<u>% Abundance</u>
1. Wastes from Liquid Systems		
(A) Powdex Resins	MN-54	0.5%
	CO-57	0.0%
	CO-58	21.1%
	CO-60	2.0%
	SR-92	0.0%
	NB-97	0.0%
	AG-110M	0.0%
	CS-134	27.1%
	CS-137	48.6%
(B) Spent Resins & Bead Resins	MN-54	0.4%
	CO-57	0.0%
	CO-58	23.3%
	CO-60	2.8%
	SR-92	0.0%
	NB-97	0.0%
	AG-110M	0.2%
	CS-134	2.0%
	CS-137	3.4%
	I-131	66.4%
	TC-99M	0.9%
	CR-51	0.0%
(C) Evaporator Concentrates	MN-54	0.5%
	CO-58	27.2%
	CO-60	4.1%
	TC-99M	0.1%
	I-131	20.5%
	I-133	0.5%
	I-134	0.5%
	CS-134	16.3%
	CS-137	26.7%
	LA-140	0.0%

SUMMARY OF MAJOR RADIONUCLIDE COMPOSITION (cont'd)

<u>Type of Waste</u>	<u>Radionuclide</u>	<u>% Abundance</u>
2. Dry Solid Waste		
(A) Spent Filters	MN-54	0.5%
	CO-58	55.7%
	CO-60	6.7%
	CR-51	37.0%
(B) Dry Compressible Waste	MN-54	1.80%
	CO-58	17.46%
	CO-60	19.65%
	CS-134	23.85%
	CS-137	35.83%
(C) Contaminated Equipment	MN-54	1.80%
	CO-58	17.46%
	CO-60	19.65%
	CS-134	23.85%
	CS-137	35.83%
(D) Irradiated Components	MN-54	0.5%
	CO-58	55.7%
	CO-60	6.7%
	CR-51	37.0%