SET TO TOP OF NEW PAGE AND PRESS RETURN

MCGUIRE NUCLEAR STATION

EFFLUENT AND WASTE DISPOSAL SUPPLEMENTAL INFORMATION

REPORT DATE: 08/17/88

PERIOD COVERED: START DAY = 001 STOP DAY = 182

I. REGULATORY LIMITS

A. NOBLE GASES - AIR DOSE

1. CALENDAR QUARTER - GAMMA DOSE = 5 MRAD
2. CALENDAR QUARTER - BETA DOSE = 10 MRAD
3. CALENDAR YEAR - GAMMA DOSE = 10 MRAD
4. CALENDAR YEAR - BETA DOSE = 20 MRAD

B. LIQUID EFFLUENTS - DOSE

1. CALENDAR QUARTER - TOTAL BODY DOSE = 1.5 MREM
2. CALENDAR QUARTER - ORGAN DOSE = 5 MREM
3. CALENDAR YEAR - TOTAL BODY DOSE = 3 MREM
4. CALENDAR YEAR - ORGAN DOSE = 10 MREM

C. IODINE - 131 AND 133, TRITIUM, PARTICULATES W/T 1/2 > 8 DAYS - ORGAN DOSE

1. CALENDAR QUARTER = 7.5 MREM
2. CALENDAR YEAR = 15 MREM

II. MAXIMUM PERMISSIBLE CONCENTRATIONS

A. GASEOUS EFFLUENTS - INFORMATION FOUND IN OFFSITE DOSE CALCULATION MANUAL

B. LIQUID EFFLUENTS - INFORMATION FOUND IN 10CFR20, APPENDIX B, TABLE II, COLUMN 2

III. AVERAGE ENERGY - NOT APPLICABLE

IV. MEASUREMENTS AND APPROXIMATIONS OF TOTAL RADIOACTIVITY

INFORMATION FOUND IN OFFSITE DOSE CALCULATION MANUAL

V. BATCH RELEASES

A. LIQUID EFFLUENT

1. 3.17E+02 = TOTAL NUMBER OF BATCH RELEASES
2. 5.50E+04 = TOTAL TIME(MIN.) FOR BATCH RELEASES
3. 7.55E+03 = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE
4. 1.73E+02 = AVERAGE TIME(MIN.) FOR A BATCH RELEASE
5. 3.00E+01 = MINIMUM TIME(MIN.) FOR A BATCH RELEASE
6. 1.42E+06 = AVERAGE DILUTION WATER FLOW DURING RELEASES(GPM)

B. GASEOUS EFFLUENT

1. 3.02E+02 = TOTAL NUMBER OF BATCH RELEASES
2. 6.08E+05 = TOTAL TIME(MIN.) FOR BATCH RELEASES
3. 4.46E+04 = MAXIMUM TIME(MIN.) FOR A BATCH RELEASE
4. 2.01E+03 = AVERAGE TIME(MIN.) FOR A BATCH RELEASE
5. 1.00E+00 = MINIMUM TIME(MIN.) FOR A BATCH RELEASE

VI. ABNORMAL RELEASES

A. LIQUID

1. NUMBER OF RELEASES 0
2. TOTAL ACTIVITY RELEASED(CURIES) 0

B. GASEOUS

1. NUMBER OF RELEASES 0
2. TOTAL ACTIVITY RELEASED(CURIES) 0

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SUPPLEMENTAL REPORT PAGE 2

MCGUIRE NUCLEAR STATION

Values represented by "0.00E+00" within the body of the semi-annual and/or annual report are below the minimum detectable limits of the McGuire counting systems. Typical MDA's for the McGuire counting system's are listed below:

ISOTOPE	ENERGY (Kev)	AVERAGE MDA
Liquid		
XE-133	80	6.0E-8
CE-144	133	1.2E-7
KR-88	196	1.7E-7
XE-135	249	2.3E-8
KR-87	402	2.5E-7
CS-137	661	2.6E-7
MO-99	77)	4.3E-7
MN-54	8 4	2.2E-8
ZN-65	1115	4.0E-8
CO-60	1332	4.4E-8
Gas		
XE-133	80	2.5E-8
Kr-85m	151	1.0E-8
Xe-131M	163	3.3E-7
Kr-88	196	4.7E-8
Xe-133m	233	7.9E-8
Xe-135	250	9.5E-9
Xe-138	258	6.3E-6
Kr-87	402	4.7E-8
Kr-85	514	2.5E-6
Xe-135M	526	1.9E-6
Ar-41	1293	3.6E-8

McGUIRE NUCLEAR STATION

The estimated percentage of error for both Liquid and Gaseous effluent release data at McGuire Nuclear Station has been determined to be +31%. This number was derived by summing the following individual estimates of errors:

1) Flow rate determining devices = +13%

2) Counting error = +15%

3) Sample preparation error = + 3%

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MCGUIRE NUCLEAR STATION
UNIT 1
RADIOACTIVE EFFLUENT RELEASES
DATE : 08/17/88

I. LIQUID RELEASES

	UNITS	1ST QTR	2ND QTR	YEAR : 1988 SUBTOTAL
1. GROSS RADIOACTIVITY				
A. TOTAL RELEASE	CURIES	1.52E-01	4.92E-01	6.44E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	2.61E-10	6.29E-10	4.18E-10
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	4.82E-09	1.94E-08	1.94E-08
2. TRITIUM				
A. TOTAL RELEASE	CURIES	1.73E+02	1.60E+02	3.33E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	2.29E-07	2.04E-07	2.16E-07
3. DISSOLVED NOBLE GASES				
A. TOTAL RELEASE	CURIES	3.43E+00	3.38E+00	6.82E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	4.54E-09	4.32E-09	4.42E-09
4. GROSS ALPHA ACTIVITY				
A. TOTAL RELEASE	CURIES	0.00E+00	0.00E+00	0.00E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	0.00E+00	0.00E+00	0.00E+00
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL	LITERS	1.73E+06	4.85E+06	6.58E+06
6. VOLUME OF DILUTION WATER	LITERS	7.57E+11	7.84E+11	1.54E+12
7. RADIONUCLIDES RELEASED	CURIES			
NA-24		6.81E-04	4.68E-05	7.28E-04
K-40		9.49E-05	4.29E-04	5.24E-04
CR-51		1.96E-03	4.76E-02	4.95E-02
MN-54		7.46E-03	1.13E-02	1.87E-02
MN-56		2.85E-06	0.00E+00	2.85E-06
FE-55		3.33E-02	8.84E-02	1.22E-01
FE-59		3.75E-04	2.89E-03	3.26E-03
CO-57		1.93E-04	6.23E-04	8.16E-04
CO-58		2.95E-02	1.99E-01	2.29E-01
CO-60		4.70E-02	5.81E-02	1.05E-01
ZN-65		2.83E-04	3.72E-04	6.55E-04
ZN-69M		2.04E-06	9.71E-07	3.01E-06
BR-82		8.27E-06	1.89E-05	2.70E-05
RB-88		7.56E-05	7.77E-05	1.53E-04
SR-89		0.00E+00	2.38E-05	2.38E-05
SR-90		0.00E+00	3.03E-06	3.03E-06
SR-92		3.67E-04	2.18E-04	5.85E-04
ZR-95		1.20E-03	2.96E-03	4.16E-03
ZR-97		0.00E+00	3.54E-05	3.54E-05
NB-95		2.75E-03	4.61E-03	7.36E-03
NB-97		1.40E-03	1.39E-03	2.79E-03
MO-99		2.05E-05	7.94E-04	8.15E-04
TC-99M		7.94E-04	1.65E-03	2.44E-03
RU-103		7.38E-05	3.35E-04	4.09E-04
RU-106		6.76E-04	5.54E-04	1.23E-03
AG-110M		1.84E-03	1.96E-03	3.81E-03
I-131		6.74E-03	2.63E-02	3.27E-02
I-132		2.48E-06	9.62E-05	9.20E-05
I-133		2.58E-03	1.16E-03	3.74E-03
I-134		6.91E-05	0.00E+00	6.91E-05
I-135		1.57E-04	6.31E-05	2.20E-04
SB-122		2.75E-05	1.72E-05	4.47E-05
SB-124		1.36E-04	2.51E-03	2.64E-03
SB-125		5.39E-03	1.81E-02	2.34E-02
SN-113		6.04E-04	7.05E-04	1.31E-03
CS-134		2.16E-03	3.15E-03	5.31E-03
CS-136		4.39E-06	1.59E-04	1.63E-04
CS-137		3.68E-03	5.23E-03	8.92E-03
CS-138		0.00E+00	6.95E-03	6.95E-03
BA-139		4.09E-05	1.48E-05	5.57E-05
BA-140		3.63E-05	1.63E-04	2.00E-04
LA-140		6.16E-04	1.13E-03	1.74E-03
CE-141		0.00E+00	4.38E-05	4.38E-05
CE-143		3.91E-06	3.48E-04	3.52E-04
CE-144		6.89E-05	2.96E-04	3.65E-04
BI-214		9.54E-07	1.85E-05	1.94E-05
PB-214		3.03E-05	1.02E-04	1.33E-04
NP-239		0.00E+00	2.27E-03	2.27E-03
AR-41		1.00E-05	7.19E-04	7.29E-04
KR-85		0.00E+00	7.02E-04	7.02E-04
KR-85M		6.34E-04	3.28E-04	9.62E-04
KR-87		0.00E+00	3.67E-03	3.67E-03
XE-131M		7.45E-03	1.07E-02	1.81E-02
XE-133		3.27E+00	3.28E+00	6.55E+00
XE-133M		5.98E-02	4.61E-02	1.05E-01
XE-135		9.26E-02	4.37E-02	1.36E-01
XE-135M		1.69E-04	6.28E-06	1.75E-04

MCGUIRE UNIT 1 LIQUID RELEASE 001-091 88 08/17/88

SKIN	MAXIMUM DOSE-	1.75D-03	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE		
	CO 60	91.74 %							
BONE	MAXIMUM DOSE-	1.99D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH		
	CS 134	28.09 %							
	CS 137	68.16 %							
LIVER	MAXIMUM DOSE-	3.75D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH		
	H 3	38.13 %							
	CS 134	24.48 %							
	CS 137	34.66 %							
T. BODY	MAXIMUM DOSE-	2.90D-02	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	37.01 %							
	CS 134	29.78 %							
	CS 137	30.54 %							
THYROID	MAXIMUM DOSE-	2.25D-02	MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING		
	H 3	61.63 %							
	I 131	37.95 %							
KIDNEY	MAXIMUM DOSE-	2.19D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING		
	H 3	65.44 %							
	CS 134	15.03 %							
	CS 137	19.41 %							
LUNG	MAXIMUM DOSE-	1.75D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING		
	H 3	82.79 %							
	CS 134	5.93 %							
	CS 137	8.88 %							
GI-LLI	MAXIMUM DOSE-	3.65D-02	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	29.44 %							
	CO 60	7.90 %							
	NB 95	56.73 %							

SKIN MAXIMUM DOSE- 2.23D-03 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- SHORE

CO	60	85.87 %

BONE MAXIMUM DOSE- 2.82D-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH

CS	134	28.03 %
CS	137	66.34 %

LIVER MAXIMUM DOSE- 4.56D-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH

H	3	28.00 %
CS	134	28.50 %
CS	137	39.36 %

T. BODY MAXIMUM DOSE- 3.54D-02 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

H	3	27.03 %
CS	134	34.50 %
CS	137	34.50 %

THYROID MAXIMUM DOSE- 4.72D-02 MREM CRITICAL AGE- INFANT CRITICAL PATHWAY- DRINKING

H	3	26.24 %
I	131	73.67 %

KIDNEY MAXIMUM DOSE- 2.34D-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- DRINKING

H	3	54.62 %
CS	134	17.25 %
CS	137	25.07 %

LUNG MAXIMUM DOSE- 1.70D-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- DRINKING

H	3	74.92 %
CS	134	8.51 %
CS	137	12.43 %

GI-LLI MAXIMUM DOSE- 5.31D-02 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

H	3	18.04 %
CO	58	6.52 %
CO	60	6.48 %
NB	95	63.65 %

SKIN MAXIMUM DOSE- 3.99D-03 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- SHORE

CO 60 88.41 %

BONE MAXIMUM DOSE- 4.82D-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH

CS 134 28.10 %
CS 137 67.03 %

LIVER MAXIMUM DOSE- 8.31D-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH

H 3 32.51 %
CS 134 26.75 %
CS 137 37.25 %

T. BODY MAXIMUM DOSE- 6.44D-02 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

H 3 31.46 %
CS 134 32.44 %
CS 137 32.70 %

THYROID MAXIMUM DOSE- 6.98D-02 MREM CRITICAL AGE- INFANT CRITICAL PATHWAY- DRINKING

H 3 37.53 %
I 131 62.28 %

KIDNEY MAXIMUM DOSE- 4.52D-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- DRINKING

H 3 59.78 %
CS 134 15.26 %
CS 137 22.35 %

LUNG MAXIMUM DOSE- 5.43D-02 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- DRINKING

H 3 78.85 %
CS 134 7.24 %
CS 137 10.65 %

GI-LLI MAXIMUM DOSE- 8.96D-02 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

H 3 22.61 %
CO 60 7.06 %
NB 95 60.84 %

MCGUIRE NUCLEAR STATION
UNIT 2
RADIOACTIVE EFFLUENT RELEASES
DATE : 08/17/88

I. LIQUID RELEASES

	UNITS	1ST QTR	2ND QTR	YEAR : 1988 SUBTOTAL
1. GROSS RADIOACTIVITY				
A. TOTAL RELEASE	CURIES	1.52E-01	4.92E-01	6.44E-01
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	2.01E-10	6.28E-10	4.18E-10
C. MAXIMUM CONCENTRATION RELEASED	UCI/ML	4.82E-09	1.94E-08	1.94E-08
2. TRITIUM				
A. TOTAL RELEASE	CURIES	1.73E+02	1.60E+02	3.33E+02
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	2.29E-07	2.04E-07	2.16E-07
3. DISSOLVED NOBLE GASES				
A. TOTAL RELEASE	CURIES	3.43E+00	3.38E+00	6.82E+00
B. AVERAGE CONCENTRATION RELEASED	UCI/ML	4.54E-09	4.32E-09	4.42E-09
4. GROSS ALPHA ACTIVITY				
A. TOTAL RELEASE	CURIES	0.00E+00	0.00E+00	0.00E+00
B. AVERAGE CONCENTRAT.OK RELEASED	UCI/ML	0.00E+00	0.00E+00	0.00E+00
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL	LITERS	1.73E+06	4.85E+06	6.58E+06
6. VOLUME OF DILUTION WATER	LITERS	7.57E+11	7.84E+11	1.54E+12
7. RADIONUCLIDES RELEASED	CURIES			
NA-24		6.81E-04	4.68E-05	7.28E-04
K-40		9.49E-05	4.29E-04	5.24E-04
CR-51		1.96E-03	4.76E-02	4.95E-02
MN-54		7.46E-03	1.13E-02	1.87E-02
MN-56		2.85E-06	0.00E+00	2.85E-06
FE-55		3.33E-02	6.84E-02	1.02E-01
FE-59		3.75E-04	2.89E-03	3.26E-03
CO-57		1.93E-04	6.23E-04	8.16E-04
CO-58		2.95E-02	1.99E-01	2.29E-01
CO-60		4.70E-02	5.81E-02	1.05E-01
ZN-65		2.83E-04	3.72E-04	6.55E-04
ZN-69M		2.04E-06	9.71E-07	3.01E-06
BR-82		8.27E-06	1.88E-05	2.70E-05
RB-88		7.56E-05	7.77E-05	1.53E-04
SR-89		0.00E+00	2.38E-05	2.38E-05
SR-90		0.00E+00	3.03E-06	3.03E-06
SR-92		3.67E-04	2.18E-04	5.85E-04
ZR-95		1.20E-03	2.96E-03	4.16E-03
ZR-97		0.00E+00	3.54E-05	3.54E-05
NB-95		2.75E-03	4.61E-03	7.36E-03
NB-97		1.40E-03	1.39E-03	2.79E-03
MO-99		2.05E-05	7.98E-04	8.15E-04
TC-99M		7.94E-04	1.65E-03	2.44E-03
RU-103		7.38E-05	3.35E-04	4.09E-04
RU-106		6.76E-04	5.54E-04	1.23E-03
AG-110M		1.86E-03	1.96E-03	3.81E-03
I-131		6.39E-03	2.63E-02	3.27E-02
I-132		5.78E-06	8.62E-05	9.20E-05
I-133		2.58E-03	1.16E-03	3.74E-03
I-134		6.91E-05	0.00E+00	6.91E-05
I-135		1.57E-04	6.31E-05	2.20E-04
SB-122		2.75E-05	1.72E-05	4.47E-05
SB-124		1.36E-04	2.51E-03	2.64E-03
SB-125		5.39E-03	1.81E-02	2.34E-02
SN-113		6.94E-04	7.05E-04	1.30E-03
CS-134		2.16E-03	3.15E-03	5.31E-03
CS-136		4.39E-06	1.59E-04	1.63E-04
CS-137		3.68E-03	5.23E-03	8.92E-03
CS-138		0.00E+00	6.95E-03	6.95E-03
BA-139		4.09E-05	1.48E-05	5.57E-05
BA-140		3.63E-05	1.63E-04	2.00E-04
LA-140		6.16E-04	1.13E-03	1.74E-03
CE-141		0.00E+00	4.38E-05	4.38E-05
CE-143		3.91E-06	3.48E-04	3.52E-04
CE-144		6.89E-05	2.96E-04	3.65E-04
BI-214		9.54E-07	1.85E-05	1.94E-05
PB-214		3.03E-05	1.02E-04	1.33E-04
NP-239		0.00E+00	2.27E-03	2.27E-03
AR-41		1.00E-05	7.19E-04	7.29E-04
KR-85		0.00E+00	7.02E-04	7.02E-04
KR-85M		6.34E-04	3.28E-04	9.62E-04
KR-87		0.00E+00	3.67E-03	3.67E-03
XE-131M		7.45E-03	0.0E-02	1.81E-02
XE-133		3.27E+00	3.28E+00	6.55E+00
XE-133M		5.88E-02	4.6 -02	1.05E-01
XE-135		9.26E-02	4.3E-02	1.36E-01
XE-135M		1.69E-04	6.28E-06	1.75E-04

MCGUIRE UNIT 2 LIQUID RELEASE 001-091 88 08/17/88

SKIN	MAXIMUM DOSE-	1.75D-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE			
	CO 60	91.74 %							
BONE	MAXIMUM DOSE-	1.99D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH			
	CS 134	28.09 %							
	CS 137	68.16 %							
LIVER	MAXIMUM DOSE-	3.75D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH			
	H 3	38.13 %							
	CS 134	24.48 %							
	CS 137	34.66 %							
T. BODY	MAXIMUM DOSE-	2.90D-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH			
	H 3	37.01 %							
	CS 134	29.78 %							
	CS 137	30.54 %							
THYROID	MAXIMUM DOSE-	2.25D-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING			
	H 3	61.63 %							
	I 131	37.95 %							
KIDNEY	MAXIMUM DOSE-	2.19D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING			
	H 3	65.44 %							
	CS 134	13.03 %							
	CS 137	19.41 %							
LUNG	MAXIMUM DOSE-	1.75D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING			
	H 3	82.79 %							
	CS 134	5.93 %							
	CS 137	8.88 %							
GI-LLI	MAXIMUM DOSE-	3.66D-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH			
	H 3	29.44 %							
	CO 60	7.90 %							
	NB 95	56.73 %							

MCGUIRE UNIT 2 LIQUID RELEASE 092-182 88 08/17/88

SKIN	MAXIMUM DOSE-	2.23D-03 MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE		
	CO 60	85.87 %						
BONE	MAXIMUM DOSE-	2.82D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH		
	CS 134	28.03 %						
	CS 137	66.34 %						
LIVER	MAXIMUM DOSE-	4.56D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH		
	H 3	28.00 %						
	CS 134	28.50 %						
	CS 137	39.36 %						
T. BODY	MAXIMUM DOSE-	3.54D-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	27.03 %						
	CS 134	34.50 %						
	CS 137	34.50 %						
THYROID	MAXIMUM DOSE-	4.72D-02 MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING		
	H 3	26.24 %						
	I 131	73.67 %						
KIDNEY	MAXIMUM DOSE-	2.34D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING		
	H 3	54.62 %						
	CS 134	17.25 %						
	CS 137	25.07 %						
LUNG	MAXIMUM DOSE-	1.70D-02 MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING		
	H 3	74.92 %						
	CS 134	8.51 %						
	CS 137	12.43 %						
GI-LLI	MAXIMUM DOSE-	5.31D-02 MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH		
	H 3	18.04 %						
	CO 58	6.52 %						
	CO 60	6.48 %						
	NB 95	63.65 %						

MCGUIRE UNIT 2 LIQUID RELEASE 001-18Z 88 08/17/88

SKIN	MAXIMUM DOSE-	3.99D-03	MREM	CRITICAL AGE-	TEEN	CRITICAL PATHWAY-	SHORE
	CO 60	88.41 %					
BONE	MAXIMUM DOSE-	4.82D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	CS 134	28.10 %					
	CS 137	67.03 %					
LIVER	MAXIMUM DOSE-	8.31D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	FISH
	H 3	32.51 %					
	CS 134	26.75 %					
	CS 137	37.23 %					
T. BODY	MAXIMUM DOSE-	6.44D-02	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	31.45 %					
	CS 134	32.44 %					
	CS 137	32.70 %					
THYROID	MAXIMUM DOSE-	6.98D-02	MREM	CRITICAL AGE-	INFANT	CRITICAL PATHWAY-	DRINKING
	H 3	37.53 %					
	I 131	62.28 %					
KIDNEY	MAXIMUM DOSE-	4.52D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	59.78 %					
	CS 134	15.26 %					
	CS 137	22.35 %					
LUNG	MAXIMUM DOSE-	3.43D-02	MREM	CRITICAL AGE-	CHILD	CRITICAL PATHWAY-	DRINKING
	H 3	78.83 %					
	CS 134	7.24 %					
	CS 137	10.65 %					
GI-LLI	MAXIMUM DOSE-	8.96D-02	MREM	CRITICAL AGE-	ADULT	CRITICAL PATHWAY-	FISH
	H 3	22.61 %					
	CO 60	7.06 %					
	NB 95	60.84 %					

SET TO NEW PAGE AND PRESS RETURN

MCGUIRE NUCLEAR STATION
UNIT 1
RADIOACTIVE EFFLUENT RELEASES
DATE : 08/16/88

II. AIRBORNE RELEASES

YEAR : 1988

	UNITS	1ST QTR	2ND QTR	SUBTOTAL
1. TOTAL NOBLE GASES	CURIES	7.45E+02	5.55E+02	1.30E+03
2. TOTAL HALOGENS	CURIES	2.66E-03	2.98E-03	5.65E-03
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	3.46E-04	6.75E-05	4.14E-04
4. TOTAL TRITIUM	CURIES	3.93E+00	4.78E+00	8.71E+00
5. TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	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
7. RADIONUCLIDES RELEASED	CURIES			
PARTICULATES				
NA-24		1.60E-09	0.00E+00	1.60E-09
CL-38		3.86E-09	5.22E-08	5.61E-08
K-40		1.87E-05	4.01E-06	2.28E-05
CR-51		0.00E+00	4.83E-07	4.83E-07
MN-54		8.25E-07	0.00E+00	8.25E-07
CO-57		0.00E+00	7.59E-11	7.59E-11
CO-58		6.49E-06	1.62E-05	2.27E-05
CO-60		1.37E-05	1.93E-05	3.30E-05
BR-82		1.38E-10	2.45E-09	2.59E-09
RB-88		1.46E-04	8.80E-06	1.55E-04
SR-89		1.03E-06	0.00E+00	1.03E-06
SR-92		3.01E-08	9.16E-09	3.93E-08
NB-95		5.58E-10	0.00E+00	5.58E-10
TC-99M		2.24E-11	0.00E+00	2.24E-11
CS-134		4.73E-05	0.00E+00	4.73E-05
CS-136		8.52E-06	0.00E+00	8.52E-06
CS-137		1.03E-04	3.38E-06	1.06E-04
CS-138		3.66E-07	2.75E-07	6.41E-07
BA-139		0.00E+00	4.04E-07	4.04E-07
CE-141		0.00E+00	2.55E-10	2.55E-10
BI-214		7.77E-08	1.09E-05	1.09E-05
PB-212		0.00E+00	3.64E-07	3.64E-07
PB-214		9.26E-08	3.34E-06	3.43E-06
HALOGENS				
I-131		1.75E-03	2.56E-03	4.31E-03
I-132		5.73E-08	4.51E-05	4.52E-05
I-133		9.19E-04	3.78E-04	1.30E-03
I-134		0.00E+00	1.12E-07	1.12E-07
I-135		7.35E-09	3.96E-07	4.04E-07
GASES				
AR-41		1.86E+00	1.58E+00	3.44E+00
KR-85		2.68E-01	4.03E+00	4.29E+00
KR-85M		1.99E+00	8.23E-01	2.81E+00
KR-87		2.79E-01	9.19E-02	3.71E-01
KR-88		1.89E+00	7.31E-01	2.62E+00
XE-131M		1.48E+00	4.75E+00	6.23E+00
XE-133		6.97E+02	5.25E+02	1.22E+03
XE-133M		9.96E+00	6.08E+00	1.60E+01
XE-135		2.97E+01	1.26E+01	4.23E+01
XE-135M		2.14E-03	7.73E-04	2.92E-03
XE-138		6.86E-04	0.00E+00	6.86E-04

MCGUIRE UNIT 1 GAS DOSE 001-091 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 0.50 MILES N

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 8.49E-01 MILLIRADS
GAMMA AIR DOSE = 3.64E-01 MILLIRADS

TOTAL BODY DOSE = 2.21E-01 MILLIREM

KR 88	9.46%
XE133	64.84%
XE135	18.11%
AR 41	5.37%

TOTAL SKIN DOSE = 5.82E-01 MILLIREM

KR 88	4.95%
XE133	69.57%
XE135	18.20%
AR 41	3.27%

MCGUIRE UNIT 1 GA^ DOSE 001-091 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 1.50 MILES ESE

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 98.45%

MAXIMUM ORGAN DOSE = 1.22E-01 MILLIREM
I 131 98.30%

MCGUIRE UNIT 1 GAS DOSE 092-182 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 0.50 MILES NNE

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 1.34E+00 MILLIRADS
GAMMA AIR DOSE = 5.03E-01 MILLIRADS

TOTAL BODY DOSE = 3.00E-01 MILLIREM		TOTAL SKIN DOSE = 8.29E-01 MILLIREM	
XE133	60.75%	XE133	82.66%
XE135	9.22%	XE135	8.80%

MCGUIRE UNIT 1 GAS DOSE 092-182 88 RELEASE WEIGHTED MET REPORT SUMMARY 09/16/88
SPECIAL LOCATION
AT 1.50 MILES ESE

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 97.57%

MAXIMUM ORGAN DOSE = 1.73E-01 MILLIREM
I 131 98.48%

MCGUIRE UNIT 1 GAS DOSE 001-182 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 0.50 MILES NNE

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 2.12E+00 MILLIRADS
GAMMA AIR DOSE = 8.40E-01 MILLIRADS

TOTAL BODY DOSE = 5.03E-01 MILLIREM

KR 88	6.24%
XE133	74.51%
XE135	12.73%

TOTAL SKIN DOSE = 1.36E+00 MILLIREM

KR 88	3.18%
XE133	77.58%
XE135	12.46%

MCGUIRE UNIT 1 GAS DOSE 001-182 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 1.50 MILES ESE

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 97.94%

MAXIMUM ORGAN DOSE = 2.95E-01 MILLIREM
I 131 98.42%

50.000 NEW PAGE AND PRESS RETURN

MCGUIRE NUCLEAR STATION
UNIT 2
RADIOACTIVE EFFLUENT RELEASES
DATE : 08/16/88

II. AIRBORNE RELEASES

YEAR : 1988

	UNITS	1ST QTR	2ND QTR	SUBTOTAL
1. TOTAL NOBLE GASES	CURIES	7.45E+02	5.55E+02	1.30E+03
2. TOTAL HALOGENS	CURIES	2.66E-03	2.98E-03	5.65E-03
3. TOTAL PARTICULATE GROSS BETA-GAMMA	CURIES	3.46E-04	6.75E-05	4.14E-04
4. TOTAL TRITIUM	CURIES	3.93E+00	4.78E+00	8.71E+00
5. TOTAL PARTICULATE GROSS ALPHA ACTIVITY	CURIES	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
7. RADIONUCLIDES RELEASED	CURIES			
PARTICULATES				
NA-24		1.60E-09	0.00E+00	1.60E-09
CL-38		3.86E-09	5.22E-08	5.61E-08
K-40		1.87E-05	4.01E-06	2.28E-05
CR-51		0.00E+00	4.83E-07	4.83E-07
MN-54		8.25E-07	0.00E+00	8.25E-07
CO-57		0.00E+00	7.59E-11	7.59E-11
CO-58		6.49E-06	1.62E-05	2.27E-05
CO-60		1.37E-05	1.93E-05	3.30E-05
BR-82		1.38E-10	2.45E-09	2.59E-09
RB-88		1.46E-04	8.80E-06	1.55E-04
SR-89		1.03E-06	0.00E+00	1.03E-06
SR-92		3.01E-08	9.16E-09	3.93E-08
NB-95		5.58E-10	0.00E+00	5.58E-10
TC-99M		2.24E-11	0.00E+00	2.24E-11
CS-134		4.73E-05	0.00E+00	4.73E-05
CS-136		8.52E-06	0.00E+00	8.52E-06
CS-137		1.03E-04	3.38E-06	1.06E-04
CS-138		3.66E-07	2.75E-07	6.41E-07
BA-139		0.00E+00	4.04E-07	4.04E-07
CE-141		0.00E+00	2.55E-10	2.55E-10
BI-214		7.77E-08	1.09E-05	1.09E-05
PB-212		0.00E+00	3.64E-07	3.64E-07
PB-214		9.26E-08	3.34E-06	3.43E-06
HALOGENS				
I-131		1.75E-03	2.56E-03	4.31E-03
I-132		5.73E-08	4.51E-05	4.52E-05
I-133		9.19E-04	3.78E-04	1.30E-03
I-134		0.00E+00	1.12E-07	1.12E-07
I-135		7.35E-09	3.96E-07	4.04E-07
GASES				
AR-41		1.86E+00	1.58E+00	3.44E+00
KR-85		2.68E-01	4.03E+00	4.29E+00
KR-85M		1.99E+00	8.23E-01	2.81E+00
KR-87		2.79E-01	9.19E-02	3.71E-01
KR-88		1.89E+00	7.31E-01	2.62E+00
XE-131M		1.48E+00	4.75E+00	6.23E+00
XE-133		6.97E+02	5.25E+02	1.22E+03
XE-133M		9.96E+00	6.08E+00	1.60E+01
XE-135		2.97E+01	1.26E+01	4.23E+01
XE-135M		2.14E-03	7.73E-04	2.92E-03
XE-138		6.86E-04	0.00E+00	6.86E-04

MCGUIRE UNIT 2 GAS DOSE 001-091 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 0.50 MILES N

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 8.49E-01 MILLIRADS
GAMMA AIR DOSE = 3.64E-01 MILLIRADS

TOTAL BODY DOSE = 2.21E-01 MILLIREM

KR 88	9.46%
XE133	64.84%
XE135	18.11%
AR 41	5.37%

TOTAL SKIN DOSE = 5.82E-01 MILLIREM

KR 88	4.95%
XE133	69.57%
XE135	18.20%
AR 41	3.27%

MCGUIRE UNIT 2 GAS DOSE 001-091 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 1.50 MILES ESE

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 98.45%

MAXIMUM ORGAN DOSE = 1.22E-01 MILLIREM
I 131 98.30%

MONTICELLO UNIT 2 GAS DOSE 092-182 38 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 0.50 MILES NNE

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 1.34E+00 MILLIRADS
GAMMA AIR DOSE = 5.03E-01 MILLIRADS

TOTAL BODY DOSE = 3.00E-01 MILLIREM
XE133 80.75%
XE135 9.22%

TOTAL SKIN DOSE = 6.29E-01 MILLIREM
XE133 82.66%
XE135 8.80%

MCGUIRE UNIT 2 GAS DOSE 092-182 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 1.59 MILES ESE

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 97.57%

MAXIMUM ORGAN DOSE = 1.75E-01 MILLIREM
I 131 98.48%

MCGUIRE UNIT 2 GAS DOSE 001-182 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 0.50 MILES NNE

NOBLE GAS EXPOSURE:

BETA AIR DOSE = 2.12E+00 MILLIRADS
GAMMA AIR DOSE = 8.40E-01 MILLIRADS

TOTAL BODY DOSE = 5.03E-01 MILLIREM		TOTAL SKIN DOSE = 1.36E+00 MILLIREM	
KR 88	6.24%	KR 88	3.18%
XE133	74.51%	XE133	77.58%
XE135	12.73%	XE135	12.46%

MCGUIRE UNIT 2 GAS DOSE 001-182 88 RELEASE WEIGHTED MET REPORT SUMMARY 08/16/88
SPECIAL LOCATION
AT 1.50 MILES ESE

IODINE, PARTICULATE, AND TRITIUM EXPOSURE SUMMARY:

MAXIMUM ORGAN - THYROID
CRITICAL AGE - INFANT
CRITICAL PATHWAY - GOATMILK @ 97.94%

MAXIMUM ORGAN DOSE = 2.95E-01 MILLIREM
I 131 98.42%

SET TO TOP OF NEW PAGE AND PRESS RETURN

ENVIRONMENTAL RADIOLOGICAL LABORATORY
RADIOACTIVE EFFLUENT RELEASES 8
08/15/88
PERIOD COVERED: START DAY = 001
STOP DAY = 091

TYPE COVERED: MNSCCW

I. LIQUID RELEASES

	UNITS	PERIOD COVERED	P
1. GROSS RADIOACTIVITY			
A. TOTAL RELEASE	CURIES	6.53E-05	5
2. TRITIUM			
A. TOTAL RELEASE	CURIES	0.00E+00	0
3. DISSOLVED NOBLE GASES			
A. TOTAL RELEASE	CURIES	0.00E+00	0
4. ALPHA ACTIVITY			
A. TOTAL RELEASE	CURIES	0.00E+00	0

DO YOU WANT THE ISOTOPE LIST?(Y/N)
Y

5. RADIONUCLIDES

MN-54	1.71E-06	6
CO-58	3.05E-06	6
CO-60	2.32E-07	7
CD-115	1.87E-05	5
I-131	5.53E-06	6
CS-134	1.56E-05	5
CS-137	3.05E-05	5
TOTAL VOLUME DISCHARGED (GALS.)	1.24E+07	7

SUMMARY COMPLETE
THANK YOU

SET TO TOP OF NEW PAGE AND PRESS RETURN

ENVIRONMENTAL RADIOLOGICAL LABORATORY
RADIOACTIVE EFFLUENT RELEASES 8
08/15/88
PERIOD COVERED: START DAY = 092
STOP DAY = 182

TYPE COVERED: MNSCCW

I. LIQUID RELEASES

	UNITS	PERIOD COVERED	P
1. GROSS RADIOACTIVITY			
A. TOTAL RELEASE	CURIES	1.95E-04	4
2. TRITIUM			
A. TOTAL RELEASE	CURIES	0.00E+00	0
3. DISSOLVED NOBLE GASES			
A. TOTAL RELEASE	CURIES	0.00E+00	0
4. ALPHA ACTIVITY			
A. TOTAL RELEASE	CURIES	0.00E+00	0

DO YOU WANT THE ISOTOPE LIST?(Y/N)
Y

5. RADIONUCLIDES

MN-54	0.00E+00	6
CO-58	6.45E-05	5
CO-60	6.72E-05	5
CD-115	0.00E+00	5
I-131	2.76E-05	5
CS-134	1.46E-05	5
CS-137	2.08E-05	5
TOTAL VOLUME DISCHARGED (GALS.)	1.48E+07	7

SUMMARY COMPLETE
THANK YOU

SET TO TOP OF NEW PAGE AND PRESS RETURN

ENVIRONMENTAL RADIOLOGICAL LABORATORY
RADIOACTIVE EFFLUENT RELEASES 8
08/15/88
PERIOD COVERED: START DAY = 001
STOP DAY = 182

TYPE COVERED: MNSCCW

I. LIQUID RELEASES

	UNITS	PERIOD COVERED	P
1. GROSS RADIOACTIVITY			
A. TOTAL RELEASE	CURIES	2.60E-04	4
2. TRITIUM			
A. TOTAL RELEASE	CURIES	0.00E+00	0
3. DISSOLVED NOBLE GASES			
A. TOTAL RELEASE	CURIES	0.00E+00	0
4. ALPHA ACTIVITY			
A. TOTAL RELEASE	CURIES	0.00E+00	0

DO YOU WANT THE ISOTOPE LIST?(Y/N)
Y

5. RADIONUCLIDES

MN-54	1.71E-06	6
CO-58	6.75E-05	5
CO-60	6.74E-05	5
CD-115	1.87E-05	5
I-131	3.31E-05	5
CS-134	3.02E-05	5
CS-137	4.13E-05	5

TOTAL VOLUME DISCHARGED (GALS.)	2.72E+07	7

SUMMARY COMPLETE
THANK YOU

SKIN MAXIMUM DOSE- 3.28D-07 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- SHORE

CS 134 32.65 %
CS 137 64.70 %

BONE MAXIMUM DOSE- 7.41D-05 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH

CS 134 35.22 %
CS 137 64.74 %

LIVER MAXIMUM DOSE- 9.98D-05 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH

CS 134 50.06 %
CS 137 49.88 %

T. BODY MAXIMUM DOSE- 7.16D-05 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

CS 134 56.27 %
CS 137 43.70 %

THYROID MAXIMUM DOSE- 1.21D-05 MREM CRITICAL AGE- INFANT CRITICAL PATHWAY- DRINKING

I 131 100.00 %

KIDNEY MAXIMUM DOSE- 3.30D-05 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH

CS 134 48.23 %
CS 137 51.63 %

LUNG MAXIMUM DOSE- 1.29D-05 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH

CS 134 47.65 %
CS 137 52.29 %

GI-LLI MAXIMUM DOSE- 2.98D-06 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

MN 54 5.47 %
CS 134 43.96 %
CS 137 47.85 %

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ENVIRONMENTAL RADIOLOGICAL LABORATORY
RADIOACTIVE EFFLUENT RELEASES 8
08/19/88
PERIOD COVERED: START DAY = 092
STOP DAY = 182

TYPE COVERED: MNSCCW

I. LIQUID RELEASES

	UNITS	PERIOD COVERED	P
1. GROSS RADIOACTIVITY			
A. TOTAL RELEASE	CURIES	1.95E-04	4
2. TRITIUM			
A. TOTAL RELEASE	CURIES	0.00E+00	0
3. DISSOLVED NOBLE GASES			
A. TOTAL RELEASE	CURIES	0.00E+00	0
4. ALPHA ACTIVITY			
A. TOTAL RELEASE	CURIES	0.00E+00	0

DO YOU WANT THE ISOTOPE LIST?(Y/N)
Y

5. RADIONUCLIDES

MN-54	0.00E+00	6
CO-58	6.45E-05	5
CO-60	6.72E-05	5
CD-115	0.00E+00	5
I-131	2.76E-05	5
CS-134	1.46E-05	5
CS-137	2.08E-05	5
TOTAL VOLUME DISCHARGED (GALS.)	1.48E+07	7

SUMMARY COMPLETE
THANK YOU

SKIN MAXIMUM DOSE- 6.63D-06 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- SHORE

CO 60 81.11 %
CS 134 5.56 %
CS 137 11.94 %

BONE MAXIMUM DOSE- 2.70D-04 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH

CS 134 33.23 %
CS 137 66.22 %

LIVER MAXIMUM DOSE- 3.63D-04 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH

CS 134 47.33 %
CS 137 51.14 %

T. BODY MAXIMUM DOSE- 2.58D-04 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

CS 134 53.79 %
CS 137 45.28 %

THYROID MAXIMUM DOSE- 2.23D-04 MREM CRITICAL AGE- INFANT CRITICAL PATHWAY- DRINKING

I 131 100.00 %

KIDNEY MAXIMUM DOSE- 1.24D-04 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH

CS 134 44.35 %
CS 137 51.48 %

LUNG MAXIMUM DOSE- 5.99D-05 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH

CO 60 8.97 %
CS 134 41.59 %
CS 137 49.37 %

GI-LLI MAXIMUM DOSE- 1.95D-05 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

CO 58 18.28 %
CO 60 49.51 %
CS 134 12.51 %
CS 137 18.30 %

SET TO TOP OF NEW PAGE AND PRESS RETURN

ENVIRONMENTAL RADIOLOGICAL LABORATORY
RADIOACTIVE EFFLUENT RELEASES 8
08/19/88
PERIOD COVERED: START DAY = 001
STOP DAY = 182

TYPE COVERED: MNSCCW

I. LIQUID RELEASES

	UNITS	PERIOD COVERED	P
1. GROSS RADIOACTIVITY			
A. TOTAL RELEASE	CURIES	2.60E-04	4
2. TRITIUM			
A. TOTAL RELEASE	CURIES	0.00E+00	0
3. DISSOLVED NOBLE GASES			
A. TOTAL RELEASE	CURIES	0.00E+00	0
4. ALPHA ACTIVITY			
A. TOTAL RELEASE	CURIES	0.00E+00	0

DO YOU WANT THE ISOTOPE LIST?(Y/N)
Y

5. RADIONUCLIDES

MN-54	1.71E-06	6
CO-58	6.75E-05	5
CO-60	6.74E-05	5
CD-115	1.87E-05	5
I-131	3.31E-05	5
CS-134	3.02E-05	5
CS-137	4.13E-05	5
TOTAL VOLUME DISCHARGED (GALS.)	2.72E+07	7

SUMMARY COMPLETE
THANK YOU

SKIN MAXIMUM DOSE- 3.36D-06 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- SHORE

CO 60 68.85 %
CS 134 9.73 %
CS 137 20.06 %

BONE MAXIMUM DOSE- 2.33D-04 MREM CRITICAL AGE- CHILD CRITICAL PATHWAY- FISH

CS 134 34.23 %
CS 137 65.48 %

LIVER MAXIMUM DOSE- 3.13D-04 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH

CS 134 48.20 %
CS 137 50.51 %

T. BODY MAXIMUM DOSE 2.23D-04 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

CS 134 55.04 %
CS 137 44.48 %

THYROID MAXIMUM DOSE- 1.15D-04 MREM CRITICAL AGE- INFANT CRITICAL PATHWAY- DRINKING

I 131 100.00 %

KIDNEY MAXIMUM DOSE- 1.05D-04 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH

CS 134 46.28 %
CS 137 51.55 %

LUNG MAXIMUM DOSE- 4.22D-05 MREM CRITICAL AGE- TEEN CRITICAL PATHWAY- FISH

CS 134 44.46 %
CS 137 53.78 %

GI-LLI MAXIMUM DOSE- 1.15D-05 MREM CRITICAL AGE- ADULT CRITICAL PATHWAY- FISH

CO 58 12.38 %
CO 60 10.07 %
CS 134 23.59 %
CS 137 28.39 %

MCGUIRE NUCLEAR STATION

SOLID RADIOACTIVE WASTE SHIPPED TO A DISPOSAL FACILITY

REPORT PERIOD 1/1/88 THROUGH 6/30/88

	TYPES OF WASTE SHIPPED	NUMBER OF SHIPMENTS	NUMBER OF CONTAINERS	WASTE CLASS	CONT. TYPE	BURIAL VOLUME (ft^3)	BURIAL VOLUME (m^3)	TOTAL ACT. Ci	EST. TOTAL ERROR %
1	WASTE FROM LIQUID SYSTEMS								
	(A) Dewatered Secondary Resins	7	21	AU	STC	4328.1	122.56	6.54E-2	10
	(B) Dewatered Bead Resins	4	4	2AS, 2B	HIC, A	640.5	18.14	350.84	10
	(C) Evaporator Concentrates	0	0	N/A	N/A	0	0	0	N/A
	(D) Dewatered Mechanical Filters	1	3	AS	HIC	114.9	3.25	8.2	15
	(E) Dewatered Demineralizers	3*	8	AS	6STC, 2HIC	189.4	5.36	5.73	10
	(F) Solidified Oils, Acids, Sludges	1	74	AS	STC	799.2	22.63	7.28E-3	10
2	DRY SOLID WASTE								
	(A) Dry Active Waste (compacted)	0	0	N/A	N/A	0	0	0	N/A
	(B) Dry Active Waste (non-compac)	1*	1	AS	HIC	38.3	1.08	1.19E-3	15
	(C) Dry Active Waste (brokered)	---	---	AU	STC	2156.0	61.05	3.039	15
	(D) Irradiated Components	0	0	N/A	N/A	0	0	0	N/A
	TOTALS	16**	111**	--	--	8266.4	234.07	367.88	--

* denotes multiple waste stream shipments
** does not include brokered totals

SUMMARY OF MAJOR RADIONUCLIDE COMPOSITION

Type of Wastes	Radionuclide	% Abundance*
1. Wastes from Liquid Systems		
(A) Dewatered Powdex Resins	Mn-54	0.2
	Cs-134	8.2
	Cs-137	11.4
	Fe-55	46.4
	ΣTRU	0.004
	H-3	33.2
	Co-60	0.8
	C-14	0.008
	Sr-90	0.02
	Cm-242	0.001
	Ni-63	0.2
	Pu-241	0.06
(B) Dewatered Bead Resins	H-3	0.08
	Co-60	37.5
	Co-58	12.1
	Co-57	0.1
	Mn-54	3.8
	Cs-134	7.5
	Cs-137	9.9
	Sb-122	0.6
	Cr-51	0.08
	Sb-125	0.06
	C-14	0.2
	Fe-55	11.0
	Ni-63	16.7
	Sr-90	0.3
	Cm-242	0.003
	Pu-241	0.07
	TR4	0.007
(C) Evaporator Concentrates	(None Shipped This Period)	
(D) Dewatered Mechanical Filters	C-14	0.2
	Mn-54	2.5
	Co-58	5.6
	Co-60	36.1
	Sr-90	0.002
	Ce-144	0.5
	Nb-95	1.1
	Pu-241	0.05
	Fe-55	48.5
	Ni-63	5.3
	H-3	0.2
	ΣTRU	0.002
	Cm-242	0.002

*average % abundance for all shipments

SUMMARY OF MAJOR RADIONUCLIDE COMPOSITION

(E) Dewatered Demineralizers	H-3	20.9
	Co-58	9.1
	Co-60	23.1
	Co-57	3.1
	Mn-54	4.4
	Cs-134	18.7
	Cs-137	65.4
	Ce-144	0.1
	Fe-59	0.8
	Ni-63	10.3
	I-131	0.02
	C-14	0.2
(F) Solidified (Cement) Acids, Oils, Sludges	Cr-51	13.15
	Mn-54	5.34
	Co-58	25.05
	Co-60	27.98
	Nb-95	2.23
	Pu-241	0.36
	Fe-55	20.4
	Ni-63	2.94
	Zr-95	1.68
	Cs-137	0.83
	C-14	0.04

2. Dry Solid Waste

(A) Dry Active Waste (compacted & non-compacted)	Cr-51	13.15
	Mn-54	5.34
	Co-58	25.05
	Co-60	27.98
	Nb-95	2.23
	Pu-241	0.36
	Fe-55	20.4
	Ni-63	2.94
	Zr-95	1.68
	Cs-137	0.83
	C-14	0.04
(B) Irradiated Components	(None Shipped This Period)	

ATTACHMENT II

EQUIPMENT INOPERABLE IN EXCESS OF TIME ALLOWED BY
TECHNICAL SPECIFICATIONS

The Unit 2 Staging Building Totalizer was declared inoperable on May 20, 1988 because the discharge flow totalizer did not agree with the flow gauge within 500 SCFM.

Repairs were scheduled for June 15, 1988, but were delayed to June 18, 1988 dur to higher priority work. The totalizer was declared operable on Juen 24, 1988.

DUKE POWER COMPANY
P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

August 29, 1988

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Subject: McGuire Nuclear Station
Docket Nos. 50-369 and 50-370
Semi-Annual Radioactive Effluent Release Report

Gentlemen:

Pursuant to McGuire Technical Specification 6.9.1.7, attached is the Subject Report for the period of January, 1988 through June, 1988.

Attachment 2 describes effluent monitoring equipment which was out of service in excess of the time allowed by McGuire's Technical Specifications.

A revision to Duke Power Company's Corporate Process Control Program was made during this reporting period. A copy of this revision was sent to the NRC by letter dated March 16, 1988.

As a result of radiation releases from McGuire Nuclear Station, no member of the public received an annual calculated dose exceeding those set forth in 40CFR Part 190. This determination was made considering that there are no other fuel cycle facilities nearby which would significantly increase the dose to any member of the public.

Very truly yours,

Hal B. Tucker

Hal B. Tucker

SAG/136/mmf

Attachments

xc: Dr. J. Nelson Grace,
Regional Administrator
U.S. Nuclear Regulatory Commission
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