
 * ARKANSAS POWER AND LIGHT COMPANY *
 * ARKANSAS NUCLEAR ONE, UNIT ONE *
 * REPORT ON RADIOACTIVE LIQUID EFFLUENTS *

APPENDIX "A" DOCKET 50-213 YEAR: 1978

REPORTING PARAMETERS	UNITS	JAN	FEB	MAR	QTRLY TOT	SEMI TOTL
1. GROSS BETA + GAMMA	I	I	I	I	I	I
(2) A TOTAL RELEASED	ICURIESI	0.39	0.41	0.67	1.5	1.5
(3) B AVE CON RELEASED	IUCI/MLI	3.11E-09I	9.79E-09I	8.39E-09I	2.13E-08I	2.13E-08I
(4) C MAX CON RELEASED	IUCI/MLI	1.72E-07I	5.70E-07I	1.18E-06I	7.54E-07I	7.54E-07I
2. TRITIUM	I	I	I	I	I	I
A TOTAL RELEASED	ICURIESI	6.6	7.5	4.9	19	19
(3) B AVE CON RELEASED	IUCI/MLI	5.27E-08I	1.77E-07I	6.06E-08I	2.90E-07I	2.90E-07I
3. DISS NOBLE GASES	I	I	I	I	I	I
A TOTAL RELEASED	ICURIESI	8.3	2.4	0.14	11	11
(3) B AVE CON RELEASED	IUCI/MLI	6.83E-08I	5.71E-08I	1.78E-09I	1.25E-07I	1.25E-07I
4. GROSS ALPHA	I	I	I	I	I	I
A TOTAL RELEASED	ICURIESI	1.59E-05I	0.00	0.00	1.59E-05I	1.59E-05I
(3) B AVE CON RELEASED	IUCI/MLI	1.27E-13I	0.00	0.00	1.27E-13I	1.27E-13I
5. RADWASTE RELEASED	LITERSI	6.52E 05I	9.25E 05I	1.04E 06I	2.60E 06I	2.60E 06I
6. DILUTION WATER	LITERSI	1.25E 10I	4.22E 10I	8.04E 10I	2.48E 11I	2.48E 11I
7. ISOTOPE CONC	ICURIESI	I	I	I	I	I
AG-110M	I	3.34E-03I	2.77E-03I	9.20E-03I	1.53E-02I	1.53E-02I
AA-125	I	0.00	2.39E-05I	0.00	2.39E-05I	2.39E-05I
AA-140	I	0.00	0.00	0.00	0.00	0.00
AB-7	I	0.00	8.38E-05I	2.38E-03I	2.47E-03I	2.47E-03I
AC-144	I	1.40E-03I	0.00	1.09E-04I	1.59E-03I	1.59E-03I
AD-57	I	4.14E-04I	5.61E-04I	1.10E-03I	2.08E-03I	2.08E-03I
AE-58	I	0.22	0.19	0.33	0.75	0.75
AF-60	I	3.68E-02I	3.81E-02I	0.11	0.19	0.19
AG-51	I	1.71E-02I	1.27E-02I	4.00E-02I	7.00E-02I	7.00E-02I
AH-134	I	1.24E-02I	5.28E-02I	4.38E-02I	0.11	0.11
AI-136	I	0.00	1.94E-04I	2.25E-04I	4.20E-04I	4.20E-04I
AJ-137	I	2.14E-02I	8.61E-02I	7.99E-02I	0.19	0.19
AK-138	I	0.00	0.00	0.00	0.00	0.00
AL-64	I	0.00	0.00	0.00	0.00	0.00
AM-152	I	0.00	0.00	0.00	0.00	0.00
AN-59	I	2.70E-03I	1.97E-03I	1.19E-02I	1.65E-02I	1.65E-02I
AO-131	I	5.84E-02I	1.53E-02I	4.71E-03I	7.84E-02I	7.84E-02I
AP-132	I	0.00	0.00	0.00	0.00	0.00
AP-133	I	6.07E-06I	0.00	0.00	6.07E-06I	6.07E-06I
AP-134	I	0.00	0.00	0.00	0.00	0.00
AP-135	I	0.00	0.00	0.00	0.00	0.00
AQ-140	I	0.00	0.00	6.38E-04I	6.38E-04I	6.38E-04I
AR-54	I	5.75E-03I	5.04E-03I	1.45E-02I	2.52E-02I	2.52E-02I
AS-56	I	0.00	0.00	0.00	0.00	0.00
AT-69	I	1.91E-04I	5.00E-05I	0.00	1.96E-04I	1.96E-04I
AA-24	I	1.79E-04I	0.00	1.53E-06I	1.80E-04I	1.80E-04I
AA-25	I	2.73E-02I	2.22E-02I	6.22E-03I	1.12E-02I	1.12E-02I
AA-27	I	0.00	0.00	0.00	0.00	0.00
AA-25	I	0.00	0.00	0.00	0.00	0.00
AA-229	I	0.00	0.00	0.00	0.00	0.00
AH-106	I	0.00	0.00	0.00	0.00	0.00

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

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RU-103	I	I	0.00	I	0.00	I	8.75E-051	8.75E-051	8.75E-051
SR-75	I	I	7.15E-041	I	5.37E-041	I	2.21E-041	I	1.59E-031
SR-80	I	I	0.00	I	0.00	I	1.07E-021	I	1.07E-021
SR-90	I	I	0.00	I	0.00	I	0.00	I	0.00
SR-91	I	I	1.00E-051	I	0.00	I	0.00	I	1.00E-051
SR-92	I	I	0.00	I	0.00	I	1.46E-051	I	1.46E-051
N-187	I	I	0.00	I	3.98E-071	I	0.00	I	3.98E-071
FN-55	I	I	0.00	I	4.98E-051	I	7.95E-051	I	1.29E-041
ZR-95	I	I	2.08E-031	I	1.10E-031	I	3.16E-031	I	6.34E-031
ZR-97	I	I	0.00	I	2.49E-061	I	6.31E-051	I	6.56E-051
KR-99	I	I	0.00	I	0.00	I	0.00	I	0.00
KR-99M	I	I	1.27E-031	I	1.44E-051	I	4.36E-061	I	1.29E-031
KR-97	I	I	0.00	I	0.00	I	0.00	I	0.00
KR-88	I	I	0.00	I	4.64E-061	I	0.00	I	4.64E-061
XE-131M	I	I	1.47E-021	I	0.12	I	1.64E-021	I	0.15
XE-133	I	I	8.2	I	2.3	I	0.12	I	11
XE-133M	I	I	4.23E-021	I	1.23E-031	I	0.00	I	4.35E-021
XF-125	I	I	9.14E-041	I	0.00	I	5.70E-061	I	9.20E-041
(5) % OF LIMIT (BASED ON 10 CURIES/ATR.)	I	I	3.9	I	4.1	I	6.7	I	15

REMARKS: 0.00 = N.D.
 SR-89 AND SR-90 VALUES FOR QUARTERLY ANALYSIS.

ARKANSAS POWER AND LIGHT COMPANY
 ARKANSAS NUCLEAR ONE, UNIT ONE
 REPORT ON RADIOACTIVE LIQUID EFFLUENTS
 APPENDIX "A" DOCKET 50-213 YEAR: 1978

REPORTING PARAMETERS	UNITS	APR	MAY	JUN	OTRLY TOT	SEMI TOT
1. GROSS BETA + GAMMA	I	I	I	I	I	I
(2) A. TOTAL RELEASED	ICURIESI	0.26	0.32	0.37	0.95	2.4
(3) B. AVE CON RELEASED	IUCI/MLI	2.64E-09I	3.35E-09I	2.92E-09I	9.92E-09I	3.12E-09I
(4) C. MAX CON RELEASED	IUCI/MLI	2.88E-09I	3.32E-09I	5.64E-08I	6.26E-08I	8.16E-07I
2. TRITIUM	I	I	I	I	I	I
A. TOTAL RELEASED	ICURIESI	4.86E-03I	29.	17.	37.	56.
(3) B. AVE CON RELEASED	IUCI/MLI	6.85E-11I	2.15E-07I	1.38E-07I	3.45E-07I	6.35E-07I
3. DISS NOBLE GASES	I	I	I	I	I	I
A. TOTAL RELEASED	ICURIESI	1.74E-02I	6.3	1.5	7.8	19.
(3) B. AVE CON RELEASED	IUCI/MLI	2.45E-10I	6.68E-08I	1.15E-08I	7.85E-08I	2.04E-07I
4. GROSS ALPHA	I	I	I	I	I	I
A. TOTAL RELEASED	ICURIESI	0.00	0.00	2.37E-05I	2.37E-05I	4.96E-05I
(3) B. AVE CON RELEASED	IUCI/MLI	0.00	0.00	2.66E-13I	2.66E-13I	1.27E-12I
5. RADWASTE RELEASED	ILITERSI	9.17E 05I	7.14E 05I	5.06E 05I	2.14E 06I	4.73E 06I
6. TREATMENT WATER	ILITERSI	7.09E 10I	9.50E 10I	1.27E 11I	2.93E 11I	5.41E 11I
7. ISOTOPE CONC.	ICURIESI	I	I	I	I	I
AG-110M	I	4.15E-02I	5.97E-02I	1.82E-02I	1.19E-02I	2.72E-02I
BA-133	I	0.00	0.00	0.00	0.00	2.39E-05I
BA-140	I	0.00	1.05E-03I	0.00	1.05E-03I	1.05E-03I
BE-7	I	0.00	0.00	0.00	0.00	2.47E-03I
CE-144	I	2.81E-04I	0.00	0.00	2.81E-04I	1.87E-03I
CO-57	I	6.99E-04I	4.42E-04I	7.81E-05I	1.22E-03I	3.30E-03I
CO-58	I	0.12	7.56E-02I	1.96E-02I	0.21	0.96
CO-60	I	6.49E-02I	4.40E-02I	1.35E-02I	0.12	0.31
CR-51	I	1.78E-02I	3.21E-02I	2.15E-02I	5.20E-02I	0.12
CS-134	I	1.28E-02I	2.75E-02I	0.11	0.15	0.26
CS-136	I	2.75E-05I	0.00	8.48E-06I	4.60E-05I	4.66E-04I
CS-137	I	2.05E-02I	4.46E-02I	0.17	0.24	0.43
CS-138	I	0.00	0.00	0.00	0.00	0.00
CU-64	I	0.00	0.00	0.00	0.00	0.00
EU-152	I	0.00	0.00	0.00	0.00	0.00
FE-59	I	6.20E-03I	9.17E-03I	1.39E-03I	1.67E-02I	3.33E-02I
I-131	I	1.08E-04I	4.62E-02I	4.44E-02I	9.08E-02I	0.17
I-132	I	0.00	0.00	0.00	0.00	0.00
I-133	I	0.00	1.03E-03I	9.20E-06I	1.04E-03I	1.05E-03I
I-134	I	0.00	8.75E-04I	0.00	8.75E-04I	8.75E-04I
I-135	I	2.79E-05I	0.00	0.00	2.79E-05I	2.79E-05I
LA-140	I	1.73E-05I	1.05E-03I	7.55E-05I	1.14E-03I	1.78E-03I
MN-54	I	8.92E-03I	6.73E-03I	1.74E-03I	1.74E-02I	4.27E-02I
MN-56	I	2.84E-06I	0.00	0.00	2.84E-06I	2.84E-06I
MO-99	I	0.00	9.04E-03I	0.00	9.04E-03I	9.23E-03I
NA-24	I	1.00E-05I	6.21E-05I	0.00	7.22E-05I	2.52E-04I
NB-95	I	4.09E-03I	5.76E-03I	6.94E-04I	1.05E-02I	2.17E-02I
NR-97	I	0.00	3.30E-05I	0.00	3.30E-05I	3.30E-05I
NI-65	I	0.00	3.12E-05I	0.00	3.12E-05I	3.12E-05I
NP-239	I	0.00	3.32E-03I	0.00	3.32E-03I	3.32E-03I
RU-106	I	0.00	0.00	3.55E-05I	3.55E-05I	3.55E-05I

RII-107	I	I	1.32E-051	1.04E-041	3.77E-051	1.55E-041	2.43E-041	
SE-75	I	I	0.00	1.21E-041	0.00	1.21E-041	1.72E-021	
SR-89	I	I	0.00	0.00	1.48E-021	1.48E-021	1.22E-021	
SR-90	I	I	0.00	0.00	4.81E-041	4.81E-041	4.81E-041	
SR-91	I	I	0.00	0.00	0.00	0.00	1.02E-051	
SR-92	I	I	0.00	0.00	0.00	0.00	1.46E-051	
W-107	I	I	0.00	0.00	0.00	0.00	3.98E-071	
ZN-65	I	I	0.00	7.45E-051	0.00	7.45E-051	2.04E-041	
ZR-95	I	I	1.58E-031	2.87E-021	1.88E-041	4.64E-021	1.10E-021	
ZR-97	I	I	1.11E-051	3.63E-051	0.00	4.74E-051	1.13E-041	
KR-85	I	I	0.00	0.00	0.00	0.00	0.00	
KR-85M	I	I	0.00	0.00	2.78E-071	2.78E-071	1.29E-021	
KR-87	I	I	3.36E-061	0.00	0.00	3.36E-061	3.36E-061	
KR-88	I	I	0.00	0.00	0.00	0.00	4.64E-061	
XE-131M	I	I	0.00	8.40E-031	6.55E-031	1.49E-021	0.17	
XE-133	I	I	1.70E-021	6.3	1.4	7.7	18	
XE-133M	I	I	2.09E-041	5.07E-021	6.04E-021	5.69E-021	0.10	
XE-135	I	I	1.82E-041	5.01E-021	2.79E-021	7.98E-021	0.90E-021	
3. % OF LIMIT (BASED	I	I	2.6	3.2	3.7	9.5		

ON 10 CURIES/QTR.) (5)

REMARKS: 0.00 = N.D.
 SR-89 AND SR-90 VALUES FOR QUARTERLY ANALYSIS.

RU-102	I	I	0.00	I	0.00	I	8.75E-051	8.75E-051	8.75E-051
SR-75	I	J	7.15E-041	5.57E-041	3.21E-041	1.59E-031	1.59E-031	1.59E-031	
SR-80	I	I	0.00	I	0.00	I	1.07E-021	1.07E-021	1.07E-021
SR-90	I	I	0.00	I	0.00	I	0.00	I	0.00
SR-91	I	I	1.02E-051	0.00	I	0.00	I	1.02E-051	1.02E-051
SR-92	J	J	2.19	I	0.00	I	1.45E-051	1.45E-051	1.45E-051
W-107	I	I	0.00	I	3.98E-071	0.00	I	3.98E-071	3.98E-071
W-25	I	I	0.00	I	4.98E-051	7.95E-051	1.29E-041	1.29E-041	
ZP-05	I	I	2.08E-031	1.10E-031	7.16E-031	6.34E-031	6.34E-031		
ZP-07	I	I	0.00	I	2.45E-061	5.31E-051	5.56E-051	5.56E-051	
KP-05	I	I	0.00	I	0.00	I	0.00	I	0.00
KP-05M	I	I	1.27E-031	1.44E-051	4.36E-061	1.29E-021	1.29E-021		
KP-07	I	I	0.00	I	0.00	I	0.00	I	0.00
KP-08	J	I	0.00	I	4.54E-061	0.00	I	4.54E-061	4.54E-061
XE-121M	I	I	1.47E-021	0.12	I	1.54E-021	0.15	I	0.15
XE-122	I	I	8.2	I	2.3	I	0.13	I	11.
XE-122M	I	I	4.25E-021	1.22E-071	0.00	I	4.25E-021	4.25E-021	
XE-125	I	I	9.14E-041	0.00	I	5.70E-061	9.20E-041	9.20E-041	
(5) % OF LIMIT (BASED	I	I	I	I	I	I	I	I	I
ON 10 CURIES/ATR.)	I	I	I	I	I	I	I	I	I
			2.9	4.1	5.7	15.			

REMARKS: 0.00 = N.D.
SR-89 AND SR-90 VALUES FOR QUARTERLY ANALYSIS.

FACILITY--AND UNIT# 1
 REPORT OF RADIOACTIVE EFFLUENTS (2nd) DOCKET 50-313
 FOR HALF# 1 OF YEAR#1979

(NOTE: TOT=EITHER SEMI(1ST HALF) OR ANNUAL (2ND HALF) TOTALS

RELEASES	JAN	FEB	MAR
1 GASES (CI)	4.790E-02	7.667E-02	8.036E-01
2 HALOGENS (CI)	1.111E-04	1.069E-03	1.820E-03
4 H-3 (CI)	2.059E-01	4.789E-01	3.463E-03
5 ALPHA (CI)			2.034E-02
6 MAXIMUM GAS RELEASE RATE (UCI/SEC)	5.310E-02	2.371E-05	2.000E-02
7A % APPLICABLE GAS LIMIT (8)			1.089E-01
7C % PART + I-131 LIMIT (9)			7.570E-01
8 ISOTOPES RELEASED (CI)			
PARTICULATES			
CS-137	0.000E-01	1.164E-03	5.948E-05
BA-140	0.000E-01	0.000E-01	0.000E-01
LA-140	0.000E-01	0.000E-01	0.000E-01
SR-90 (10)	4.388E-08	4.388E-08	4.388E-08
CS-134	0.000E-01	0.000E-01	1.205E-05
SR-90 (10)	1.930E-06	1.930E-06	1.930E-06
HALOGENS			
I-131	1.070E-04	1.069E-03	1.820E-03
I-132	4.158E-06	0.000E-01	0.000E-01
I-135	0.000E-01	0.000E-01	0.000E-01
GASES			
KR-85	0.000E-01	0.000E-01	8.297E-01
XE-132	2.854E-02	7.419E-02	1.471E-00
KR-88	0.000E-01	0.000E-01	7.785E-01
KR-87	0.000E-01	0.000E-01	0.000E-01
KR-85M	9.082E-00	0.000E-01	0.000E-01
XE-138	0.000E-01	0.000E-01	0.000E-01
XE-133M	0.000E-01	2.010E-00	0.000E-01
XE-135	8.451E-01	1.750E-01	0.000E-01
AR-41	0.000E-01	3.283E-01	0.000E-01
OTHERS			
XE-131M	0.000	8.97	0.206
XE-135M	0.000	0.000	0.000
F-18	0.000	0.000	0.000
PO-210	0.000	0.000	0.000
PO-210	0.000	0.000	0.000
BE-7	0.000	0.000	0.000
K-40	0.000	0.000	3.284E-07
CF-51	5.015E-06	0.000	0.000
MN-54	0.000	0.000	0.000
CO-57	0.000	0.000	4.246E-05
CO-	1.460E-04	1.262E-06	1.582E-04
PF-	0.000	0.000	0.000
CO-60	0.000	1.034E-06	4.506E-06
NI-65	0.000	0.000	0.000
TN-65	0.000	0.000	0.000

AF-75	0.000	0.000	0.000
AF-85	0.000	0.000	1.238E-09
Y-88	0.000	0.000	0.000
NE-94	0.000	0.000	0.000
NE-95	0.000	0.000	0.000
ZF	0.000	0.000	1.542E-07
RU-102	0.000	0.000	0.000
RU-106	0.000	0.000	0.000
CD-109	0.000	0.000	0.000
AG-110M	0.000	0.000	0.000
SN-112	0.000	0.000	0.000
CD-113M	0.000	0.000	0.000
SB-125	0.000	0.000	0.000
BR-132	0.000	0.000	0.000
CS-136	0.000	0.000	0.000
CE-139	0.000	0.000	0.000
CE-144	0.000	0.000	0.000
EU-152	0.000	0.000	0.000
HG-202	0.000	0.000	0.000
U-215	0.000	0.000	0.000
RA-226	0.000	0.000	0.000
SB-124	0.000	0.000	0.000
TH-228	0.000	0.000	0.000
XXXXXXXX	0.000	0.000	0.000
XXXXXXXX	0.000	0.000	0.000
NA-24	0.000	0.000	0.000
MN-56	0.000	0.000	0.000
CU-64	0.000	0.000	0.000
BR-84	0.000	0.000	0.000
RB-88	0.000	0.000	0.000
RB-89	0.000	0.000	0.000
NO-90	0.000	0.000	0.000
SR-91	0.000	0.000	0.000
Y-	0.000	0.000	0.000
SR-92	0.000	0.000	0.000
Y-92	0.000	0.000	0.000
NE-97	0.000	0.000	0.000
ZF-97	0.000	0.000	0.000
PS-212	0.000	0.000	0.000
TC-99M	0.000	0.000	0.000
SB-122	0.000	0.000	0.000
I-122	0.000	0.000	0.000
I-124	0.000	0.000	0.000
CS-138	0.000	0.000	0.000
BR-139	0.000	0.000	0.000
W-187	0.000	0.000	0.000
BI-214	0.000	0.000	0.000
PS-214	0.000	0.000	0.000
NP-239	0.000	0.000	0.000
TE-132	0.000	0.000	0.000

PE	SES	APR	MAY	JUN	TOT
1	GHSES(CI)	1.959E 03	1.889E 03	3.659E 02	5.540E 03
2	HALOGENS (CI)	3.636E-05	1.364E-05	6.623E-06	3.057E-03
4	H-3(CI)	3.522E-01	8.432E-01	2.600E-01	2.250E 00
5	ALPHA(CI)			0.000E-01	NA
6	MAXIMUM GAS RELEASE RATE(UCI/SEC)	3.671E 03	3.804E 04	2.869E 02	NA
7A	% APPLICABLE GAS LIMIT (8)			1.000E 01	NA
7C	% PART + I-131 LIMIT (9)			1.487E-02	NA
8	ISOTOPES RELEASED(CI)				

PARTICULATES					
CS-137	0.763E-07	5.122E-06	4.721E-07	1.230E-03	
BA-140	0.000E-01	0.000E-01	0.000E-01	0.000E-01	
LA-140	0.000E-01	0.000E-01	0.000E-01	0.000E-01	
SR-90 (10)	0.000E-01	0.000E-01	0.000E-01	1.316E-07	
CS-134	2.642E-07	2.729E-06	0.000E-01	1.516E-05	
SR-89 (10)	6.695E-06	6.695E-06	6.695E-06	2.588E-05	

HALOGENS					
I-	3.636E-05	1.364E-05	6.623E-06	3.052E-03	
I-131	0.000E-01	3.837E-07	0.000E-01	4.541E-06	
I-135	0.000E-01	0.000E-01	0.000E-01	0.000E-01	

GASES					
KR-85	0.000E-01	6.994E-01	0.000E-01	1.529E 00	
XE-132	0.000E-01	1.691E 03	3.423E 02	3.162E 03	
KR-88	0.000E-01	4.654E 00	0.000E-01	8.250E 01	
KR-87	0.000E-01	0.000E-01	0.000E-01	0.000E-01	
KR-85M	0.000E-01	6.511E-01	0.000E-01	9.733E 00	
XE-138	0.000E-01	6.073E-04	0.000E-01	6.073E-04	
XE-135M	0.000E-01	8.907E-01	0.000E-01	2.901E 00	
XE-135	9.992E 00	1.912E 02	2.357E 01	3.228E 02	
AR-41	0.000E-01	1.881E-01	0.000E-01	5.164E-01	

OTHERS					
XE-131M	1.949E 03	2.336E-02	0.000	1.959E 03	
XE-135M	0.000	0.000	0.000	0.000	
F-18	0.000	0.000	0.000	0.000	
00000000X	0.000	0.000	0.000	0.000	
00000000X	0.000	0.000	0.000	0.000	
BE-7	3.139E-06	0.000	0.000	3.139E-06	
K-40	0.000	0.000	0.000	3.284E-07	
CR-51	0.000	0.000	0.000	5.015E-06	
MN-54	0.000	0.000	0.000	0.000	
CO-57	0.000	0.000	0.000	4.246E-05	
CO-58	1.298E-06	2.625E-06	8.572E-07	2.182E-04	
FE-59	0.000	0.000	0.000	0.000	
CC	3.489E-07	1.966E-06	1.741E-07	8.029E-06	
NI	0.000	0.000	0.000	0.000	
ZN-65	0.000	0.000	0.000	0.000	
SE-75	0.000	0.000	0.000	0.000	
SR-85	0.000	0.000	0.000	1.238E-03	

0.000	2.667E-06	0.000	2.667E-06
NB-94	0.000	0.000	0.000
NB-95	0.000	0.000	0.000
PF-96	0.602E-07	0.000	0.000
PI-97	3.253E-07	0.000	0.000
RI-98	0.000	0.000	0.000
UD-109	0.000	0.000	0.000
AG-110M	0.000	3.827E-06	0.000
SN-113	0.000	0.000	0.000
CD-113M	0.000	0.000	0.000
SB-125	0.000	0.000	0.000
BR-133	0.000	0.000	0.000
CS-136	2.285E-07	0.000	0.000
CE-139	0.000	0.000	0.000
CE-144	0.000	0.000	0.000
EU-152	0.000	0.000	0.000
HG-203	0.000	6.675E-07	0.000
U-205	0.000	0.000	0.000
RA-226	0.000	2.020E-06	0.000
SB-124	0.000	0.000	0.000
TH-228	0.000	0.000	0.000
XXXXXXXX	0.000	0.000	0.000
XXXXXXXX	0.000	0.000	0.000
NA-24	0.000	0.000	0.000
NN-56	0.000	0.000	0.000
CU-64	0.000	0.000	0.000
BR-84	0.000	0.000	0.000
RE-88	1.087E-04	0.000	0.000
RE-89	0.000	0.000	0.000
NO-99	0.000	0.000	0.000
SP-91	0.000	0.000	0.000
Y-91M	0.000	0.000	0.000
Y-92	0.000	0.000	0.000
Y-93	0.000	0.000	0.000
Y-94	0.000	0.000	0.000
NB-97	0.000	0.000	0.000
ZR-97	0.000	0.000	0.000
FB-212	0.000	0.000	0.000
TC-99M	0.000	0.000	0.000
SB-122	0.000	0.000	0.000
I-122	0.000	0.000	0.000
I-124	0.000	0.000	0.000
CS-128	0.000	0.000	0.000
BR-129	0.000	0.000	0.000
W-187	0.000	0.000	0.000
BI-214	9.859E-06	0.000	0.000
FB-214	0.000	0.000	0.000
NP-239	0.000	0.000	0.000
TE-132	0.000	0.000	0.000

NOTES TO
"REPORT OF RADIOACTIVE EFFLUENTS"

1. "E" notation used as follows:
$$E-2 = \times 10^{-2}$$
2. Summation of Isotopic Analysis as shown in Item I.7 minus dissolved noble gases and H-3.
3. Assuming the total release is diluted by the total dilution flow (Item I.6).
4. Assuming the hottest release is diluted only by the amount of water generated in the circulating water system during the time the tank is draining.
5. Percent of limit from ETS 2.4.1.3 (Quarterly Limit).
6. Noble gases whose summation are reported in Item I.3.a, "Dissolved Noble Gases Total Release".
7. Total curies listed quarterly.
8. Percent of limit from ETS 2.4.2.4.a (Quarterly Limit).
9. Percent of Limit from ETS 2.4.2.4.b (Quarterly Limit).
10. Analysis performed quarterly.
11. Activities less than 2 sigma are recorded as ND. ND = not detected. ND entries are summed as zero because of widely varying minimum detectable concentrations which are a result of widely varying background levels.