

TABLE III.1
 BATCH LIQUID AND GASEOUS RELEASE SUMMARY
 JANUARY THROUGH DECEMBER 2000

	A. Liquid Releases All Sources			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1. Number of Batch Releases:	26	28	37	62
2. Total Time Period for Batch Releases (min):	4999	3473	4322	8839
3. Maximum Time Period for a Batch Release (min):	416	174	148	405
4. Average Time Period for Batch Releases (min):	192	124	117	143
5. Minimum Time Period for a Batch Release (min):	87	90	81	17
6. Average Dilution Stream Flow During Periods of Release into the Missouri River (mld/mld):	1.311E+09	1.272E+09	1.363E+09	1.337E+09
B. Gaseous Releases All Sources				
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1. Number of Batch Releases:	17	15	19	69
2. Total Time Period for Batch Releases (min):	67386	59615	67594	73982
3. Maximum Time Period for a Batch Release (min):	5459	6463	5166	6413
4. Average Time Period for Batch Releases (min):	3964	3974	3556	1072
5. Minimum Time Period for a Batch Release (min):	393	428	192	36

TABLE III.2

ABNORMAL BATCH LIQUID AND GASEOUS RELEASE SUMMARY

JANUARY THROUGH DECEMBER 2009

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
A. <u>Liquid Releases All Sources</u>				
Number of Releases:	0	0	0	0
Total Activity Releases (Ci):	0.000E+00	0.000E+00	0.000E+00	0.000E+00
B. <u>Gaseous Releases All Sources</u>				
Number of Releases:	0	0	0	0
Total Activity Releases (Ci):	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TABLE III.3

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

JANUARY THROUGH DECEMBER 2000

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
A. Fission & Activation Gases				
Total Release (Ci):	8.25E+01	8.06E+01	3.38E+02	2.91E+03
Avg. Release Rate for period (uCi/sec):	1.05E+01	1.03E+01	4.26E+01	3.66E+02
Percent of ODCM Limit (%):	*	*	*	*
Total Error: <u>30.19%</u>				
B. Iodines				
Total Release (Ci):	1.16E-03	3.89E-04	5.60E-05	1.18E-02
Avg. Release Rate for period (uCi/sec):	1.48E-04	4.95E-05	7.04E-06	1.49E-03
Percent of ODCM Limit (%):	*	*	*	*
Total Error: <u>44.05%</u>				
C. Particulates				
Total Release (Ci):	0.00E+00	0.00E+00	7.17E-06	2.69E-06
Avg. Release Rate for period (uCi/sec):	0.00E+00	0.00E+00	9.02E-07	3.38E-07
Percent of ODCM Limit (%):	*	*	*	*
Total Error: <u>79.10%</u>				
Gross Alpha	1.23E-05	1.07E-05	9.21E-06	1.41E-05
Total Error: <u>20.62%</u>				
D. Tritium				
Total Release (Ci):	1.77E-01	2.00E-01	2.45E-01	1.31E+00
Avg. Release Rate for period (uCi/sec):	2.26E-02	2.54E-02	3.08E-02	1.65E-01
Percent of ODCM Limit (%):	*	*	*	*
Total Error: <u>27.00%</u>				

NOTE: * Applicable limits are expressed in terms of Dose.
See Section II of this report.

TABLE III.4

GASEOUS EFFLUENTS--GROUND LEVEL RELEASES

JANUARY THROUGH DECEMBER 2000

Batch Mode

<u>Nuclides (Ci)</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
Fission & Activation Gases				
Argon-41	2.15E-01	2.10E-01	2.30E-01	1.95E-01
Krypton-85	5.70E+00	6.93E+00	2.87E+01	3.90E+02
Krypton-85M	1.04E-02	5.76E-03	1.01E-02	5.59E-02
Krypton-87	0.00E+00	0.00E+00	0.00E+00	1.93E-03
Krypton-88	6.95E-03	2.39E-03	3.41E-03	3.86E-02
Xenon-131M	9.81E-01	8.74E-01	2.47E+00	6.77E+01
Xenon-133M	3.97E-01	2.18E-01	7.21E-01	1.73E+01
Xenon-133	5.06E+01	3.25E+01	1.19E+02	2.25E+03
Xenon-135	1.98E-01	9.50E-02	1.67E-01	3.35E+00
Totals for Period:	5.81E+01	4.08E+01	1.50E+02	2.73E+03
Iodines				
Iodine-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Iodine-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Iodine-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Iodine-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Totals for Period:	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Particulates				
Cadmium-109	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cesium-137	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Totals for Period:	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tritium and Gross Alpha				
Tritium	1.77E-01	2.00E-01	2.45E-01	1.31E+00
Gross Alpha	0.00E+00	0.00E+00	0.00E+00	0.00E+00

NOTE: Nuclides not displayed or reported as 0.00E+00 were determined to be below the Lower Limit of Detection (LLD) values.

TABLE III.5

GASEOUS EFFLUENTS--GROUND LEVEL RELEASES

JANUARY THROUGH DECEMBER 2000

Continuous Mode

<u>Nuclides (Ci)</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
Fission & Activation Gases				
Argon-41	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Krypton-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Krypton-85M	9.92E-02	0.00E+00	2.99E-01	0.00E+00
Krypton-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Krypton-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xenon-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xenon-133M	0.00E+00	0.00E+00	1.74E+00	7.23E-01
Xenon-133	2.29E+01	3.90E+01	1.79E+02	1.77E+02
Xenon-135	<u>1.39E+00</u>	<u>8.54E-01</u>	<u>7.53E+00</u>	<u>1.89E+00</u>
Totals for Period:	2.64E+01	3.98E+01	1.88E+02	1.80E+02
Iodines				
Iodine-131	6.14E-05	3.30E-04	2.16E-05	1.03E-02
Iodine-132	1.26E-04	0.00E+00	0.00E+00	0.00E+00
Iodine-133	4.22E-04	5.94E-05	3.44E-05	1.51E-03
Iodine-135	<u>5.55E-04</u>	<u>0.00E+00</u>	<u>0.00E+00</u>	<u>0.00E+00</u>
Totals for Period:	1.16E-03	3.89E-04	5.60E-05	1.18E-02
Particulates				
Cadmium-109	0.00E+00	0.00E+00	7.17E-06	0.00E+00
Cesium-134	0.00E+00	0.00E+00	0.00E+00	1.23E-06
Cesium-137	<u>0.00E+00</u>	<u>0.00E+00</u>	<u>0.00E+00</u>	<u>1.46E-06</u>
Totals for Period:	0.00E+00	0.00E+00	7.17E-06	2.69E-06
Tritium and Gross Alpha				
Tritium	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gross Alpha	1.23E-05	1.07E-05	9.21E-06	1.41E-05

NOTE: Nuclides not displayed or reported as 0.00E+00 were determined to be below the Lower Limit of Detection (LLD) values.

TABLE III.6

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

JANUARY THROUGH DECEMBER 2000

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
A. Fission & Activation Products				
Total Release				
(No Tritium, Gas, Alpha) (Ci):	6.31E-02	7.42E-02	2.55E-02	4.33E-01
Avg Diluted Concentration (uCi/ml):	1.81E-10	2.05E-10	6.53E-11	1.40E-09
Percent of Limit (%)				
10 CFR 20, App. B = 1.0E-06 (%):	1.81E-02	2.05E-02	6.53E-03	1.40E-01
Total Error: <u>26.08%</u>				
B. Tritium				
Total Release (Ci):	2.69E+01	9.53E+01	9.67E+01	2.86E+02
Avg Diluted Concentration (uCi/ml):	7.70E-08	2.36E-07	2.47E-07	9.21E-07
Percent of Limit (%)				
10 CFR 20, App. B = 1.0E-03 (%):	7.70E-03	2.36E-02	2.47E-02	9.21E-02
Total Error: <u>27.22%</u>				
C. Dissolved & Entrained Gases				
Total Release (Ci):	2.02E-02	1.13E-01	5.59E-02	1.10E-01
Avg Diluted Concentration (uCi/ml):	5.90E-11	3.12E-10	1.43E-10	3.53E-10
Percent of Limit (%)				
ODCM = 2.0E-04 (%):	2.90E-05	1.86E-04	7.15E-05	1.77E-04
Total Error: <u>24.91%</u>				
D. Gross Alpha Radioactivity				
Total Release (Ci):	1.91E-02	8.86E-04	2.12E-03	6.86E-03
Total Error: <u>27.22%</u>				
E. Volume of Waste Released				
Prior to Dilution (Liters):	4.02E+07	4.15E+07	4.32E+07	3.22E+07
F. Volume of Dilution Water				
This Period (Liters):	3.49E+11	3.61E+11	3.91E+11	3.10E+11

TABLE III.7

LIQUID EFFLUENTS

JANUARY THROUGH DECEMBER 2000

Batch Mode

Nuclides (Ci)	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Fission & Activation Products				
Chromium-51	1.83E-03	7.90E-04	5.59E-05	1.89E-03
Manganese-54	7.61E-04	2.03E-03	4.47E-04	4.81E-04
Iron-55	9.61E-04	1.22E-03	0.00E+00	4.62E-03
Cobalt-57	9.01E-05	9.60E-05	1.73E-05	1.38E-04
Cobalt-58	1.87E-02	9.85E-03	1.78E-03	7.61E-02
Iron-59	2.26E-05	1.87E-06	0.00E+00	1.31E-04
Cobalt-60	2.61E-03	7.91E-03	2.30E-03	2.64E-03
Selenium-75	5.69E-06	3.68E-05	5.37E-05	0.00E+00
Bromine-82	0.00E+00	0.00E+00	0.00E+00	3.72E-04
Strontium-89	0.00E+00	0.00E+00	0.00E+00	2.27E-04
Strontium-90	0.00E+00	1.68E-05	0.00E+00	0.00E+00
Yttrium-90	0.00E+00	1.68E-05	0.00E+00	0.00E+00
Niobium-95	9.21E-03	1.48E-02	1.67E-03	9.09E-04
Zirconium-95	4.75E-03	6.40E-03	6.48E-04	3.49E-04
Technetium-99M	0.00E+00	3.78E-05	0.00E+00	2.92E-04
Molybdenum-99	0.00E+00	8.83E-05	0.00E+00	2.92E-04
Technetium-101	0.00E+00	0.00E+00	0.00E+00	8.45E-06
Ruthenium-103	3.73E-05	8.08E-06	0.00E+00	0.00E+00
Rhodium-103M	3.73E-05	8.08E-06	0.00E+00	0.00E+00
Silver-110M	2.03E-03	8.79E-03	1.26E-03	9.67E-04
Tin-113	2.73E-04	4.57E-04	5.78E-05	3.58E-05
Antimony-122	0.00E+00	0.00E+00	0.00E+00	1.74E-04
Antimony-124	1.31E-04	7.59E-05	3.29E-06	4.04E-03
Antimony-125	7.94E-03	8.40E-03	3.80E-03	3.23E-02
Antimony-126	0.00E+00	0.00E+00	0.00E+00	2.40E-04
Iodine-131	1.39E-05	6.28E-04	1.48E-03	2.88E-01
Iodine-132	0.00E+00	0.00E+00	0.00E+00	9.25E-06
Tellurium-132	0.00E+00	0.00E+00	0.00E+00	1.67E-05
Iodine-133	0.00E+00	0.00E+00	0.00E+00	5.23E-05
Cesium-134	4.12E-03	3.52E-03	3.58E-03	8.52E-03
Cesium-136	0.00E+00	6.63E-06	0.00E+00	4.37E-04
Cesium-137	8.67E-03	7.57E-03	8.36E-03	6.36E-03
Lanthanum-140	3.67E-05	5.82E-05	3.37E-06	2.74E-03
Barium-140	0.00E+00	0.00E+00	0.00E+00	7.77E-04
Praseodymium-144	3.93E-04	6.14E-04	0.00E+00	0.00E+00
Cerium-144	3.93E-04	6.72E-04	0.00E+00	0.00E+00
Hafnium-181	4.56E-05	2.61E-05	0.00E+00	0.00E+00
Tantalum-182	5.55E-06	0.00E+00	0.00E+00	0.00E+00
Mercury-203	0.00E+00	1.14E-06	0.00E+00	0.00E+00
Totals for Period:	6.31E-02	7.42E-02	2.55E-02	4.33E-01
Dissolved & Entrained Gases				
Argon-41	0.00E+00	0.00E+00	0.00E+00	1.87E-06
Krypton-85	8.53E-04	2.59E-02	1.65E-02	5.05E-03
Xenon-131M	1.52E-04	5.39E-03	1.02E-03	3.43E-03
Xenon-133M	9.81E-06	1.20E-04	4.40E-05	3.73E-04
Xenon-133	1.92E-02	8.14E-02	3.83E-02	1.01E-01
Xenon-135	0.00E+00	0.00E+00	3.51E-05	2.80E-04
Totals for Period:	2.02E-02	1.13E-01	5.59E-02	1.10E-01
Other, Tritium and Alpha				
Tritium	2.69E+01	8.52E+01	9.67E+01	2.86E+02
Alpha	8.13E-03	8.86E-04	1.12E-03	6.86E-03

NOTE: Nuclides not displayed or reported as 0.00E+00 were determined to be below the Lower Limit of Detection (LLD) values.

TABLE III.8

LIQUID EFFLUENTS

JANUARY THROUGH DECEMBER 2000

Continuous Mode

<u>Nuclides (Ci)</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
Fission & Activation Products				
Totals for Period:	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Dissolved & Entrained Gases				
Totals for Period:	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Other, Tritium and Alpha				
Tritium	0.00E+00	1.23E-01	0.00E+00	0.00E+00
Alpha	1.10E-02	0.00E+00	1.00E-03	0.00E+00

NOTE: Nuclides not displayed or reported as 0.00E+00 were determined to be below the Lower Limit of Detection (LLD) values.