

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (YEAR) 1980

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

	Unit	Quarter 1st	Quarter 2nd	Est. Total Error, %
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A. Fission & activation gases

1. Total release	Ci	2.00 E+1	6.00 E+1	2.5 E+1
2. Average release rate for period	μ Ci/sec	2.40 E0	7.63 E0	
3. Percent of Technical specification limit	%	1.14 E-1	2.34 E-1	

B. Iodines

1. Total iodine-131	Ci	3.23 E-4	5.02 E-4	2.5 E-1
2. Average release rate for period	μ Ci/sec	4.11 E-5	6.38 E-5	
3. Percent of technical specification limit	%	7.06 E-2	5.64 E-2	

C. Particulates

1. Particulates with half-lives >8 days	Ci	7.37 E-4	5.88 E-4	2.5 E-1
2. Average release rate for period	μ Ci/sec	9.37 E-5	7.48 E-5	
3. Percent of technical specification limit	%	7.06 E-2	5.64 E-2	
4. Gross alpha radioactivity	Ci	<1.66 E-7	<1.35 E-7	

D. Tritium

1. Total release	Ci	1.67 E-0	2.16 E-0	2.5 E+1
2. Average release rate for period	μ Ci/sec	2.12 E-1	2.75 E-1	
3. Percent of technical specification limit	%	E	E	

TABLE 2B

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (YEAR) 1980

LIQUID EFFLUENTS

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		1st Quarter	2nd Quarter	1st Quarter	2nd Quarter
strontium-89	Ci	E	E	1.54 E-4	2.50 E-4
strontium-90	Ci	2.34 E-3	E	9.63 E-4	3.89 E-4
cesium-134	Ci	1.94 E-3	E	1.79 E-2	2.44 E-2
cesium-137	Ci	3.14 E-3	E	5.00 E-2	5.74 E-2
iodine-131	Ci	E	E	1.35 E-2	2.33 E-2
cobalt-58	Ci	1.56 E-3	E	3.05 E-4	1.83 E-4
cobalt-60	Ci	1.87 E-3	E	3.31 E-2	2.82 E-2
iron-59	Ci	E	E	5.85 E-4	1.88 E-3
zinc-65	Ci	E	E	7.36 E-4	5.80 E-4
manganese-54	Ci	1.60 E-3	E	5.62 E-3	6.63 E-3
chromium-51	Ci	E	E	5.46 E-3	266 E-2
zirconium-niobium-95	Ci	E	E	2.97 E-3	5.76 E-3
molybdenum-99	Ci	E	E	2.63 E-3	1.48 E-3
technetium-99m	Ci	E	E	3.70 E-4	4.67 E-4
barium-lanthanum-140	Ci	E	E	3.02 E-3	3.66 E-3
cerium-141	Ci	4.92 E-4	E	7.61 E-4	4.23 E-4
tin 113	Ci	E	E	3.91 E-5	3.43 E-4
sodium 24	Ci	E	E	9.00 E-6	6.02 E-5
iron 55	Ci	1.44 E-1	3.77 E-1	3.35 E-2	6.66 E-2
nickel 63	Ci	2.53 E-1	2.74 E-1	1.42 E-2	7.25 E-3
unidentified	Ci	0.00 E0	0.00 E0	0.00 E0	0.00 E0
Total for period (above)	Ci	1.84 E-1	3.99 E-1	2.22 E-1	4.81 E-1
xenon-133	Ci	E	E	5.97 E-2	9.70 E-1
xenon-135	Ci	E	E	4.35 E-3	2.99 E-2
manganese 56	Ci			8.51 E-5	7.12 E-6
cobalt 57	Ci		1.06 E-4	1.37 E-4	4.23 E-4
antimony 122	Ci	2.97 E-4		9.80 E-5	1.09 E-3
antimony 124	Ci			2.72 E-4	4.84 E-4
antimony 125	Ci			1.16 E-3	2.49 E-3
silver 110m	Ci			2.27 E-4	1.24 E-3
Niobium 97	Ci			3.47 E-4	1.82 E-3
tungsten 187	Ci			1.25 E-4	3.79 E-4
ruthenium 103	Ci			3.89 E-5	4.19 E-5
phosphorus 32	Ci			3.58 E-3	1.05 E-2
cerium 144	Ci	8.61 E-4			5.23 E-5
cerium 139	Ci	5.29 E-4			4.13 E-5
barium 133	Ci				2.66 E-5
iodine 134	Ci				3.60 E-5
rhodium 106	Ci				2.65 E-4
cesium 136	Ci				7.64 E-5
strontium 85	Ci				5.00 E-5
rubidium 88	Ci				1.64 E-2
iodine 132	Ci				4.18 E-4
iodine 135	Ci				9.56 E-4
yttrium 88	Ci				1.63 E-3
strontium 92	Ci				6.96 E-5

TABLE 2B

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LIQUID EFFLUENTS

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter	Quarter	Quarter	2nd Quarter
strontium-89	Ci	. E	. E	. E	. E
strontium-90	Ci	. E	. E	. E	. E
cesium-134	Ci	. E	. E	. E	. E
cesium-137	Ci	. E	. E	. E	. E
iodine-131	Ci	. E	. E	. E	. E
cobalt-58	Ci	. E	. E	. E	. E
cobalt-60	Ci	. E	. E	. E	. E
iron-59	Ci	. E	. E	. E	. E
zinc-65	Ci	. E	. E	. E	. E
manganese-54	Ci	. E	. E	. E	. E
chromium-51	Ci	. E	. E	. E	. E
zirconium-niobium-95	Ci	. E	. E	. E	. E
molybdenum-99	Ci	. E	. E	. E	. E
technetium-99m	Ci	. E	. E	. E	. E
barium-lanthanum-140	Ci	. E	. E	. E	. E
cerium-141	Ci	. E	. E	. E	. E
<i>iodine 133</i>	Ci	. E	. E	. E	4.24 E-3
<i>cesium 138</i>	Ci	. E	. E	. E	8.17 E-5
	Ci	. E	. E	. E	
<i>mercury 203</i>	Ci	. E	. E	. E	1.11 E-5
<i>yttrium 91m</i>	Ci	. E	. E	. E	1.46 E-5
unidentified	Ci	. E	. E	. E	. E
Total for period (above)	Ci	. E	. E	. E	. E
xenon-133	Ci	. E	. E	. E	. E
xenon-135	Ci	. E	. E	. E	. E