

EFFLUENT AND WASTER DISPOSAL SEMIANNUAL REPORT  
SUPPLEMENTAL INFORMATION  
FOR TIME PERIOD JANUARY 1, 1982 TO JUNE 30, 1982

1. Regulatory Limits  
Code of Federal Regulations Title 10 Part 20 only
2. Maximum Permissible Concentrations
  - a. Fission and activation gases: None
  - b. Iodines: None
  - c. Particulates, Half-lives  $> 8$  days:  $4 \times 10^{-12}$   $\mu$  Ci/ml
  - d. Liquid effluents:  $3 \times 10^{-5}$   $\mu$  Ci/ml
3. Average Energy  
185 KEV for gamma radiation
4. Measurements and Approximations of Total Radioactivity
  - a. Fission and activation gases: None
  - b. Iodines: None
  - c. Particulates: Stack samples are alpha counted and converted to  $\mu$  Ci/ml. The confirmed receiving and chemical and isotopic analysis is used.
  - d. Liquid effluents: None
5. Batch Releases
  - a. Liquid: None
  - b. Gaseous:
    1. Number of batch releases: 75 for press stack; 70 for furnace stack.
    2. Total time period for batch releases: press stack - 600 hrs; furnace stack - 560 hrs.
    3. Maximum time period for a batch release: 8 hours
    4. Average time period for batch releases: 8 hours
    5. Minimum time period for a batch release: 8 hours
6. Abnormal Releases
  - a. Liquid: None
  - b. Gaseous: None
7. Material:  $U_3O_8$  High Fired 84.64% Total U 93.15%  $^{235}U$

TABLE 1A

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GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	Unit	Quarter 1	Quarter 2	Est. Total Error %
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- A. Fission & Activation gasses: None
- B. Iodines: None
- C. Particulates

1.	Particulates with half-lives >8 days	Ci	1.11E-06	6.07E-08	5.22E+02
2.	Average release rate for period	µCi/sec	5.94E-07	3.99E-07	
3.	Percent of technical specification limit	%	5.39E+00	3.45E+00	
4.	Gross alpha radioactivity	Ci	1.11E-06	6.07E-08	

- D. Tritium  
None

TABLE 1B

GASEOUS EFFLUENTS-ELEVATED RELEASE

Nuclides Released	Batch Mode	
	1. Quarter	2. Quarter
1. Fission gases: None		
2. Iodines: None		
3. Particulates		
93.15% Enriched U	1.11E-06	6.07E-08

TABLE 1C

Not Applicable

TABLE 2A

Not Applicable

TABLE 2B  
Not Applicable

TABLE 3  
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (NOT IRRADIATED FUEL)

1. Type of Waste	<u>Unit</u>	<u>6 Month Period</u>	<u>Est. Total Error, %</u>
a. Spent resins, filter sludges, evaporator bottom, etc.	m <sup>3</sup> Ci	None	
b. Dry compressed waste, contaminated equip., etc.	m <sup>3</sup> Ci	6.20E+01 8.24E-03	5.86E+00
c. Irradiated components, control rod, etc.	m <sup>3</sup>	None	
d. Other			

2. Estimate of major nuclide composition (by type of waste)

a. <sup>234</sup> U	% 1.01 E + 00
b. <sup>235</sup> U	% 9.32 E + 01
c. <sup>236</sup> U	% 4.60 E - 01
d. <sup>238</sup> U	% 5.38 E + 00

3. Solid Waste Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
0	Laundry Truck	Indian Orchard, MA
1	Truck	Barnwell, S.C.

B. IRRADIATED FUEL SHIPMENTS (Disposition)

Not Applicable

TABLE 4A  
Not Applicable - No Data

TABLE 4B  
Not Applicable - No Data