

UNC RECOVERY SYSTEMS



Division of United Nuclear Corporation
A **UNC RESOURCES** Company

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Wood River Junction, Rhode Island 02894

Telephone 401/364-7701

NISRI: 83-059

July 25, 1983

Director, Region I
United States Nuclear
Regulatory Commission
631 Park Avenue,
King of Prussia, PA 19406

Gentlemen:

UNC RECOVERY SYSTEMS, Wood River Junction, Rhode Island presents its semi-annual report of radioactive material in effluents released to unrestricted areas. This report covers the period of January 1, 1983 to July 1, 1983 and is provided in compliance with Title 10, Code of Federal Regulations, Part 70, Paragraph 59.

Liquid effluents are measured at a final collection point and no dilution factors are applied to this data.

Conversion of counting data to grams or microcuries of enriched U-235 is accomplished by using the conservative value of 143 alpha disintegrations per minute per microgram and the standard value of $2.22E^6$ disintegrations per minute per microcurie.

The attached Table 1 summarizes the required data. Any release above the limits specified in 10CFR20 is noted on the table.

UNC RECOVERY SYSTEMS operates under License SNM-777, Docket 70-820.

Very truly yours,
UNC RECOVERY SYSTEMS

K. A. Helgeson
Manager, Quality Assurance and
Nuclear and Industrial Safety

Attachment: Table 1, Liquid Effluent Releases

cc: 2 copies, Director, Region I
6 copies, Manager, Information and Processing Center,
Washington, D.C. 20555
1 copy, Director, Inspection and Enforcement,
Washington, D.C. 20555

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TABLE 1

LIQUID EFFLUENT RELEASES1983

UNC RECOVERY SYSTEMS

SNM-777, DOCKET 70-820

	<u>UNITS</u>	<u>1 st QUARTER</u>	<u>2 nd QUARTER</u>
U-235 as Gross Alpha	Ci	<u>5.7E⁻⁶</u>	<u>8.6E⁻⁶</u>
Average Concentration	Ci/ml	<u>2.7E⁻¹⁵</u>	<u>4.5E⁻¹⁵</u>
Volume of Liquid Released	Liters	<u>2.1E⁶</u>	<u>1.9E⁶</u>
Percent of Applicable Limits		<u>0.009</u>	<u>0.015</u>

NOTE: Nominal Isotopic Composition

U-234	1.01%
U-235	93.0%
U-236	0.2%
U-238	5.79%