

U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Report No. 70-820/82-08

Docket No. 70-820

License No. SNM-777 Priority 1 Category UR

Licensee: United Nuclear Corporation

Recovery Systems

Wood River Junction, Rhode Island 02894

Facility Name: UNC Recovery Systems

Inspection At: Wood River Junction, Rhode Island

Inspection Conducted: August 26-27, 1982

Inspectors: J. Roth
J. Roth, Project Inspector

9/10/82
date

Approved By: R. Keimig
R. Keimig, Chief, Projects
Branch #2, DPRP

9-14-82
date

Inspection Summary:

Inspection on August 26-27, 1982 (Report No. 70-820/82-08)

Areas Inspected: Special, announced inspection by a region-based inspector (19 hours) for the purpose of obtaining water samples from selected monitoring wells and to examine: transportation activities; review of operations; and, licensee action on previously identified enforcement items.

Results: No deviations or violations were identified.

DETAILS

1. Persons Contacted

R. Gregg, Plant Manager
D. McFadden, Operations Manager
*K. Helgeson, Nuclear and Industrial Safety and Quality Assurance
Manager
J. Murphy, Senior Health Physics Technician

*Denotes personnel present at the exit interview.

2. Licensee Action on Previously Identified Enforcement Items

(Closed) Violation (82-07-01). Failure to maintain a fenced enclosure accessible only to UNC employees around stored drums located in the facility parking lot. The inspector verified that the licensee reinstalled and was maintaining a fenced enclosure around drums that were stored in the facility parking lot. Corrective actions were completed on this violation.

3. Review of Operations

The inspector made a physical inspection of the facilities being decommissioned and decontaminated.

a. Process Building

The licensee has completed decommissioning of the process area. Grid lines, to facilitate the final contamination survey of the area, have been painted on the walls, ceilings, and floors. The licensee has removed and replaced cinder block walls on the north and east sides of the second and third floors of the facility tower (column rooms). It was noted that the roof of the process area was in poor condition and that significant rust had appeared on unpainted surfaces where rainwater got into the facility, on outside wall emergency doors and on existing cold water pipes. The licensee has initiated conduct of the final contamination survey of the process area.

No violations were identified.

b. Yard Areas

The licensee continues cleanup of the yard areas inside the restricted area fence. An additional 12 to 18 inches of soil was removed from yard areas south and east of the process building. This soil is currently being packaged for transport to burial.

No violations were identified.

c. Warehouse

The licensee is using the warehouse and the old shipping-receiving area in the process building as staging locations to prepare drums of solidified sludge and soil for shipment to burial.

No violations were identified.

4. Transportation Activities

The licensee continues to transport drums of waste to the burial site. The shipping rate has stabilized at 3 truckloads per day. From June 17, 1982, through August 27, 1982, 89 truckloads (about 60 drums each) have been shipped to burial.

The inspector observed while the licensee prepared drums of waste for shipment and placed them into the transporting vehicle. Since the drums contain material which is not classified as radioactive (less than 0.002 microcuries per gram of material as defined by 49 CFR 173.389(e)), each drum was identified with a distinct number and the weight of each drum was marked on the surface.

No violations were identified.

5. Monitoring Well Water Sampling

The inspector observed as each monitoring well was sampled. Prior to sampling, each well was pumped for about 10 minutes in order to clear out the lines of standing water and this water was discarded. The licensee took a five (5) gallon sample and the NRC sample (one (1) gallon) was split from the licensee's sample.

a. Well Water Sampling

The conditions under which each well sample was obtained are shown in the following table.

Well Water Samples

<u>Well No.</u>	<u>Sampling Date</u>	<u>Sampling Time</u>	<u>Water Temperature (°C)</u>	<u>Specific Conductivity (µmhos)</u>	<u>Water Level(ft)</u>	<u>Water Depth(ft)</u>
T-1	8/27	1220	11	35	16	65
T-2*	8/27	1125	11	150	20	57
T-3*	8/26	1210	11	1700	20	62
T-4*	8/26	1520	13	35	20	62
T-5	8/26	1050	13	35	22	65
T-6*	8/26	1003	14	900	22	52
T-7*	8/26	1535	12	150	23	65
T-8	8/26	1110	11	30	16	65
T-9*	8/26	1125	11	75	22	53
PW-1*	8/27	1153	12	40	--	--
PW-2	8/26	1445	11	30	--	--
W-A	NOT IN SERVICE					
W-B*	8/27	1114	11	130	21	28
W-D	8/26	1355	13	50	20	30
W-E	8/27	1014	11	40	19	28
W-3	8/27	1140	12	100	21	25
W-5	8/27	1205	9	35	16	26
W-6	8/27	1150	12	40	19	26
W-7*	8/26	1415	13	220	--	26
W-8A*	8/26	1225	12	2150	21	30
W-9	8/26	1505	11	35	19	33
W-10	8/26	1440	11	30	--	35
W-11	NOT IN SERVICE					
W-12*	8/26	1145	11	2100	20	35
76-U*	8/27	0916	12	260	--	75
77-B*	8/27	0951	10	1800	17	75
77-D*	8/27	0932	12	200	24	85
DH-1*	8/26	1025	13	380	22	25-35
DH-1-1*	8/26	1130	12	85	--	72-74
DH-2-1*	8/26	0951	14	60	--	88-90
DH-2-2*	8/26	1040	12	70	--	110-112

b. Sample Analysis

The well water samples marked in the table above with an * were split by the NRC inspector with the licensee. Samples obtained by the NRC were sent to the USDOE Radiological and Environmental Services Laboratory located in Idaho Falls, Idaho, for analysis. The licensee's samples were sent to Controls for Environmental Pollution, Inc. located in Santa Fe, New Mexico. Each sample was to be filtered (0.45 micron) and the soluble and insoluble fractions analyzed for gross alpha and gross beta. Samples in excess of 15 dpm/l gross

alpha and/or 50 dpm/l gross beta will be further analyzed for strontium-90, cesium-137, uranium isotopic, thorium isotopic, radium-226, radium-228, technetium-99, and gamma spectroscopy.

c. Sample Analysis Results

The sample analysis results from each laboratory will be compared by Region 1. This comparison and trend analysis with prior years sampling will be the subject of a subsequent inspection report (82-09-01).

6. Exit Interview

The inspector met with the licensee representative (denoted in paragraph 1) at the conclusion of the inspection at about 3:30 p.m. on August 27, 1982. The inspector summarized the scope and observations made during the inspection.