

January 30, 1987

SUBJECT: Memorandum delineating NRC Requested Data per Nuclear Licensing
Administrator Letter NL-86-1307

1. A radioactive waste solidification vendor, NUS, was utilized at LaSalle County between the dates of November, 1984 and February, 1985 to solidify wastes which resulted in seven shipments totaling approximately 1274 cubic feet.
2. NRC inspection reports 373/86023 and 374/86022 describe concerns with the incomplete solidification of drums processed by the LaSalle County Stock Equipment Solidification System. LaSalle County Station personnel have determined that the most probable root cause of the free-standing water in these drums stems from operational problems with the decant tank level indicators. Investigations to resolve the level indicator concerns are still pending. In the interim, the Stock Solidification System is only being used to solidify evaporator bottoms, which are not processed through the decant tanks. Bead resins are currently being dewatered by a vendor, Westinghouse-Hittman, and are being shipped in High Integrity Containers (HIC's) to offsite burial sites. Powdered resins will be solidified by a vendor and shipped to offsite burial sites in HIC's, in the near future.

8703260461 861231
PDR ADCK 05000373
R PDR

IF 1
1/1

January 30, 1987

SUBJECT: Memorandum describing a change to the LSCS Process Control Program

BACKGROUND

During the past two years there have been many operational difficulties associated with Stock Equipment System used to solidify radwaste. Now that most of the difficulties have been resolved radwaste solidification is proceeding in a timely manner. However during the interim a significant backlog of radwaste has accumulated hindering efficient operation of the system as a whole. Additionally, vendors can offer a more cost effective means for solidifying and dewatering various wastes.

For the above reasons it has been decided to employ Westinghouse Hittman Nuclear Inc. to dewater the contents of 1A/1B/2A/2B Phase Separator Tanks, the URC Sludge Tank, the Spent Resin Tank and the Waste Sludge Tank. The dewatering and subsequent transportation of waste off-site is expected to begin Nov. 7, 1986. The contract with Westinghouse Hittman (Vendor) will run through March 31, 1987.

Our Stock system has been modified to allow interfacing with the vendor's equipment. The changes, installed under Temporary System Change 1-1921-86, constitute major changes to the radwaste system and Licensee - initiated substitutions to the PCP needing review under T.S. 6.9.1. and 6.7.2. respectively.

The contractor will be using his own equipment, personnel and procedures to perform the dewatering. The dewatering will be performed in accordance with a NRC approved Topical Report (STD-R-05-011) and Process Control Program (STD-PCP-03-003) which meets the requirements of 10CFR20/50/61/71 and 100. The vendor's procedures have been approved by the On Site review and Investigative Function (#86-50 and #86-51) for implementation at LaSalle Station.

MODIFICATION DETAILS

All vendor equipment is to be maintained within the Radwaste Truck Bay. The dewatering will take place under both operating and health physics supervision. Entry level status of the Truck bay will be upgraded at the discretion of the Health Physics department.

An interface with the existing loop transfer lines is needed to transfer waste to the vendor's equipment. Flanges existing on several lines and off two new "tees" all installed under Temporary System Change 1-1921-86 will be opened and manual isolation valves will be flanged in line. The various sludge lines are collected in a common header with another manual outlet isolation valve.

An air supply, uncontaminated water supply and electrical hook-up are presently available in the truck bay.

No radioactive liquid or gaseous releases are expected. During the dewatering process air samples are taken at the outlet of the vacuum pump to determine if any net release of radioactive material occurs. If there is any release of radioactive materials, the outlet vent will be filtered and/or re-routed directly to the Radwaste Ventilation System, under the direction of the Tech Staff Engineer, resulting in no release.

Increased exposures to individuals in the unrestricted area and to the general population are not expected.

Exposure to plant personnel is expected to decrease 80% (35 man-rem) as a result of using a vendor's system. Actual exposure to plant personnel is monitored by the Health Physics Department as standard procedure.

Any comments or questions involving the above program should be addressed to John Arand, x-570.

ATTACHMENT A

LRP-1110-3
Revision 3
November 19, 1986
4

REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: LASALLE COUNTY NPS UNIT 1 & 2 DOCKET NOS.: 50-373, 50-374

YEAR: 86

I. Gaseous Effluents	UNITS	JUL	AUG	SEP	3RD QTR TOT	OCT	NOV	DEC	4TH QTR TOT	6 MO TOTAL
1. Gross Radioactivity Releases										
a. Noble Gas Release		None	None			None				
Main Stack	Curies	Detected	Detected	3.6E0	3.6E0	Detected	2.9E1	1.3E1	4.2E1	4.6E1
b. Maximum Release Rate (grab sample)	uCi/sec	N/A	N/A	1.7E1	1.7E1	N/A	6.4E1	2.4E1	6.4E1	6.4E1
c. Isotopes Released										
Kr-85m	Curies	---	---	---	---	---	8.0E-3	1.8E0	1.8E0	1.8E0
Kr-87	Curies	<8.0E-8+	<8.0E-8+	<8.0E-8+	---	<8.0E-8+	<8.0E-8+	<8.0E-8+	---	---
Kr-88	Curies	<8.3E-8+	<8.3E-8+	<8.3E-8+	---	<8.3E-8+	<8.3E-8+	<8.3E-8+	---	---
Xe-133	Curies	<4.1E-8+	<4.1E-8+	3.6E0	3.6E0	<4.1E-8+	2.7E1	1.0E1	3.7E1	4.1E1
Xe-135	Curies	<1.7E-8+	<1.7E-8+	<1.7E-8+	---	<1.7E-8+	<1.7E-8+	<1.7E-8+	---	---
Xe-135m	Curies	---	---	---	---	---	---	---	---	---
Xe-138	Curies	<1.4E-5+	<1.4E-5+	<1.4E-5+	---	<1.4E-5+	<1.4E-5+	<1.4E-5+	---	---
Ar-41	Curies	---	---	---	---	---	1.5E0	8.8E-1	2.4E0	2.4E0
d. Percent of Stack Limit	%	N/A	N/A	7.0E-5	7.0E-5	N/A	1.7E-3	1.1E-3	2.8E-3	2.9E-3
e. Average Release Rate	uCi/sec	N/A	N/A	1.4E0	4.5E-1	N/A	1.1E1	4.7E0	5.2E0	2.8E0
2. Main Stack Iodine Release										
a. Isotopes Released										
I-131	Curies	<2.4E-12+	1.4E-4	6.6E-4	8.0E-4	1.5E-3	7.1E-4	1.1E-3	3.3E-3	4.1E-3
I-132	Curies	---	---	2.1E-3	2.1E-3	8.5E-3	4.5E-3	1.4E-3	1.4E-2	1.7E-2
I-133	Curies	<3.6E-12+	2.3E-3	3.8E-3	6.1E-3	1.0E-2	5.8E-3	6.5E-3	2.2E-2	2.8E-2
I-134	Curies	---	5.8E-4	---	5.8E-4	---	1.5E-3	---	1.5E-3	2.1E-3
I-135	Curies	---	---	1.4E-3	1.4E-3	1.5E-2	6.0E-3	8.9E-3	3.0E-2	3.1E-2
b. Percent of Stack Limit	%	N/A	1.5E-4	3.8E-4	5.3E-4	1.1E-3	5.5E-4	4.2E-2	4.4E-2	4.4E-2
c. Average Release Rate	uCi/sec	N/A	1.1E-3	3.1E-3	1.4E-3	1.3E-2	7.1E-3	6.7E-3	9.1E-3	5.3E-3

*Data to be presented in an errata to this report.

+Activity of each sample is less than LLD given (uCi/cc).

ATTACHMENT A

LRP-1110-3
Revision 3
November 19, 1986
6

REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: LASALLE COUNTY NPS UNIT 1 & 2 DOCKET NOS.: 50-373, 50-374

YEAR: 86

I. Gaseous Effluents(Cont)	UNITS	JUL	AUG	SEP	3RD QTR TOT	OCT	NOV	DEC	4TH QTR TOT	6 MO TOTAL
3. Main Stack Particulate Release										
a. Gross Radioactivity (B-Y)	milli-curies	1.3E-1	4.8E-1	1.2E2	1.2E2	3.2E2	1.9E2	1.3E1	5.2E2	6.4E2
b. Gross Alpha Radioactivity	mCi	<1.0E-6+	<2.0E-6+	<1.0E-9	---	1.0E-6	*	*	*	*
c. Isotopes Released										
Cr-51	mCi	---	---	---	---	---	7.5E-1	---	7.5E-1	7.5E-1
Mn-54	mCi	4.7E-2	1.1E-1	1.1E-2	1.7E-1	6.4E-2	1.9E-1	4.1E-2	3.0E-1	4.6E-1
Co-58	mCi	<1.2E-12+	<1.2E-12+	<1.2E-12+	---	<1.2E-12+	<1.2E-12+	<1.2E-12+	---	---
Fe-59	mCi	<3.0E-12+	<3.0E-12+	<3.0E-12+	---	<3.0E-12+	<3.0E-12+	<3.0E-12+	---	---
Co-60	mCi	8.6E-2	3.7E-1	1.7E-1	6.3E-1	2.8E-1	1.3E-1	2.8E-2	4.4E-1	1.1E0
Zn-65	mCi	<2.5E-12+	<2.5E-12+	1.1E-2	1.1E-2	<2.5E-12+	<2.5E-12+	<2.5E-12+	---	1.1E-2
Sr-89	mCi	<2.0E-6+	<2.0E-6+	1.3E-8	1.3E-8	1.6E-6	*	*	*	*
Sr-90	mCi	<2.0E-6+	<2.0E-6+	4.0E-9	4.0E-9	<3.0E-6+	*	*	*	*
Zr-95	mCi	---	---	---	---	---	---	---	---	---
Nb-95	mCi	---	---	---	---	---	---	---	---	---
Ru-103	mCi	---	---	---	---	---	---	---	---	---
Aq-110m	mCi	---	---	---	---	---	---	---	---	---
Sb-124	mCi	---	---	---	---	---	---	---	---	---
Cs-134	mCi	<1.2E-12+	<1.2E-12+	<1.2E-12+	---	<1.2E-12+	<1.2E-12+	<1.2E-12+	---	---
Cs-136	mCi	---	---	---	---	---	---	---	---	---
Cs-137	mCi	<1.6E-12+	<1.6E-12+	<1.6E-12+	---	<1.6E-12+	<1.6E-12+	<1.6E-12+	---	---
Ce-141	mCi	<2.0E-12+	<2.0E-12+	<2.0E-12+	---	<2.0E-12+	<2.0E-12+	<2.0E-12+	---	---
Ce-144	mCi	<8.4E-12+	<8.4E-12+	<8.4E-12+	---	<8.4E-12+	<8.4E-12+	<8.4E-12+	---	---
Tc-99m	mCi	---	---	4.8E-1	4.8E-1	2.5E0	1.5E0	---	4.0E0	4.5E0
Ba-139	mCi	---	---	7.1E-1	7.1E-1	---	---	8.6E-1	8.6E-1	1.6E0
F-18	mCi	---	---	1.1E2	1.1E2	1.6E2	1.6E2	9.9E1	4.2E2	5.3E2
Na-24	mCi	---	---	7.4E-1	7.4E-1	2.5E0	8.5E0	6.9E-2	1.1E1	1.2E1
Cs-138	mCi	---	---	3.8E0	3.8E0	4.1E0	1.4E1	1.2E1	3.0E1	3.4E1
Rb-88	mCi	---	---	---	---	1.5E2	---	---	1.5E2	1.5E2

*Data to be presented in an errata to this report.

+Activity of each sample is less than LLD given (uCi/cc).

ATTACHMENT A

LRP-1110-3
Revision 3
November 19, 1986
8

REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: LASALLE COUNTY NPS UNIT 1 & 2 DOCKET NOS.: 50-373, 50-374

YEAR: 86

I. Gaseous Effluents(Cont)	UNITS	JUL	AUG	SEP	3RD QTR TOT	OCT	NOV	DEC	4TH QTR TOT	6 MO TOTAL
3. Main Stack Particulate Release										
d. Percent Main Stack Limit	%	9.7E-4	4.1E-3	1.9E-3	7.0E-3	3.1E-3	1.6E-3	3.4E-4	5.1E-3	1.2E-2
e. Average Release Rate	uCi/sec	5.0E-5	1.8E-4	4.6E-2	1.5E-2	1.2E-1	2.4E-2	4.9E-3	7.8E-2	4.7E-2
4. Sum of Iodine and Particulate	Curies	1.3E-4	3.5E-3	1.3E-1	1.3E-1	4.0E-1	2.1E-1	3.1E-2	6.4E-1	7.7E-1
a. Percent Main Stack Limit	%	9.7E-4	4.2E-3	2.3E-3	7.5E-3	4.2E-3	2.2E-3	4.2E-2	4.8E-2	5.6E-2
5. Gaseous Tritium										
a. Release Curies	Curies	1.2E-5	6.6E-4	6.2E-1	6.2E-1	9.1E-1	1.3E-3	5.8E0	6.7E0	7.3E0
b. Average Release Rate	uCi/sec	4.5E-6	2.5E-4	2.4E-1	7.8E-2	3.4E-1	5.0E-4	2.2E0	8.5E-1	4.6E-1
c. Percent Tech Spec Limit	%	1.6E-8	8.8E-7	6.2E-5	6.3E-5	1.2E-3	1.7E-6	7.8E-3	9.0E-3	9.0E-3

*Data to be presented in an errata to this report.

+Activity of each sample is less than LLD given (uCi/cc).

ATTACHMENT A

LRP-1110-3
Revision 3
November 19, 1986
10

REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: LASALLE COUNTY NPS UNIT 1 & 2 DOCKET NOS.: 50-373, 50-374

YEAR: 86

II. Liquid Effluents(Cont)	UNITS	JUL	AUG	SEP	3RD QTR TOT	OCT	NOV	DEC	4TH QTR TOT	6 MO TOTAL
1. Gross Radioactivity (B- γ)									No Liquids Released	
a. Total Release	Curies	8.0E-4	1.0E-3	1.6E-2	1.8E-2	N/A	N/A	N/A	N/A	1.8E-2
b. Avq. Conc. Released	uCi/ml	9.8E-9	2.8E-7	4.4E-8	1.1E-7	N/A	N/A	N/A	N/A	1.1E-7
c. Max. Conc. Released	uCi/ml	9.8E-9	2.8E-7	1.2E-7	2.8E-7	N/A	N/A	N/A	N/A	2.8E-7
d. Percent of Tech Spec	%	9.7E-4	1.5E-5	3.4E-4	1.3E-3	N/A	N/A	N/A	N/A	1.3E-3
2. Tritium										
a. Total Release	Curies	2.1E-2	2.1E-2	9.5E-2	1.4E-1	N/A	N/A	N/A	N/A	1.4E-1
b. Avq. Conc. Released	uCi/ml	2.9E-4	2.9E-4	3.2E-4	3.0E-4	N/A	N/A	N/A	N/A	3.0E-4
c. Percent of Tech Spec	%	4.4E-6	4.4E-6	2.0E-5	2.9E-5	N/A	N/A	N/A	N/A	2.9E-5
3. Dissolved Noble Gases										
a. Total Release	Curies	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	0.0
b. Avq. Conc. Released	uCi/ml	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
c. Percent of Tech Spec	%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4. Gross Alpha Radioactivity										
a. Total Release	Curies	5.1E-8	4.9E-8	2.1E-7	3.1E-7	N/A	N/A	N/A	N/A	3.1E-7
b. Avq. Conc. Released	uCi/ml	6.2E-13	7.0E-10	1.2E-13	2.3E-10	N/A	N/A	N/A	N/A	2.3E-10
5. Volume of Liquid Waste	Liters	7.3E4	7.0E4	3.0E5	4.4E5	N/A	N/A	N/A	N/A	4.4E5
6. Volume of Dilution Water	Liters	8.2E7	7.9E7	1.7E9	1.9E9	N/A	N/A	N/A	N/A	1.9E9

*Data to be presented in an errata to this report.

+Activity of each sample is less than LLD given (uCi/cc).

ATTACHMENT A

LRP-1110-3
Revision 3
November 19, 1986
12

REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: LASALLE COUNTY NPS UNIT 1 & 2 DOCKET NOS.: 50-373, 50-374

YEAR: 86

II. Liquid Effluents(Cont)	UNITS	JUL	AUG	SEP	3RD QTR TOT	OCT	NOV	DEC	4TH QTR TOT	6 MO TOTAL
7. Isotopes Released	milli- curies	8.0E-1	1.1E0	1.5E1	1.7E1	N/A	N/A	N/A	No Liquids Released N/A	1.7E1
Cr-51	mCi	---	---	1.4E0	1.4E0	N/A	N/A	N/A	N/A	1.4E0
Mn-54	mCi	6.0E-2	2.3E-1	4.4E0	4.7E0	N/A	N/A	N/A	N/A	4.7E0
Co-58	mCi	4.9E-3	1.1E-2	3.9E-1	4.1E-1	N/A	N/A	N/A	N/A	4.1E-1
Fe-55	mCi	6.1E-1	5.9E-1	1.9E0	3.1E0	N/A	N/A	N/A	N/A	3.1E0
Fe-59	mCi	<9.4E-8+	<9.4E-8+	2.1E-1	2.1E-1	N/A	N/A	N/A	N/A	2.1E-1
Co-60	mCi	1.2E-1	2.5E-1	6.5E0	6.9E0	N/A	N/A	N/A	N/A	6.9E0
Zn-65	mCi	<9.0E-8+	<9.0E-8+	1.4E-1	1.4E-1	N/A	N/A	N/A	N/A	1.4E-1
Sr-89	mCi	1.0E-3	1.0E-3	5.0E-3	7.0E-3	N/A	N/A	N/A	N/A	7.0E-3
Sr-90	mCi	2.9E-5	2.1E-5	1.0E-4	1.5E-4	N/A	N/A	N/A	N/A	1.5E-4
Zr-95	mCi	---	---	---	---	N/A	N/A	N/A	N/A	---
Nb-95	mCi	---	---	---	---	N/A	N/A	N/A	N/A	---
Ru-103	mCi	---	---	---	---	N/A	N/A	N/A	N/A	---
I-131	mCi	<5.0E-8+	<5.0E-8+	<5.0E-8+	---	N/A	N/A	N/A	N/A	---
Cs-134	mCi	<4.3E-8+	<4.3E-8+	<4.3E-8+	---	N/A	N/A	N/A	N/A	---
Cs-137	mCi	<5.7E-8+	<5.7E-8+	<5.7E-8+	---	N/A	N/A	N/A	N/A	---
Ce-141	mCi	<7.6E-8+	<7.6E-8+	<7.6E-8+	---	N/A	N/A	N/A	N/A	---
Ce-144	mCi	<3.1E-7+	<3.1E-7+	<3.1E-7+	---	N/A	N/A	N/A	N/A	---
Xe-133	mCi	<3.4E-7+	<3.4E-7+	<3.4E-7+	---	N/A	N/A	N/A	N/A	---
Xe-133m	mCi	<3.4E-7+	<3.4E-7+	<3.4E-7+	---	N/A	N/A	N/A	N/A	---
Xe-135	mCi	<4.0E-8+	<4.0E-8+	<4.0E-8+	---	N/A	N/A	N/A	N/A	---
Sb-124	mCi	---	---	1.4E-2	1.4E-2	N/A	N/A	N/A	N/A	1.4E-2
As-76	mCi	---	---	3.0E-2	3.0E-2	N/A	N/A	N/A	N/A	3.0E-2

*Data to be presented in an errata to this report.

+Activity of each sample is less than LLD given (uCi/cc).

DOCUMENT ID 0412h/0360A

ATTACHMENT A

LRP-1110-3
Revision 3
November 19, 1986
14

REPORT OF RADIOACTIVE EFFLUENTS

FACILITY: LASALLE COUNTY NPS UNIT 1 & 2 DOCKET NOS.: 50-373, 50-374

YEAR: 86

III. Solid Waste Shipped
Offsite for Burial
or Disposal

	UNITS	JUL	AUG	SEP	3RD QTR TOT	OCT	NOV	DEC	4TH QTR TOT	6 MO TOTAL
1. Spent Resins, Filter Sludges, Evaporator Bottoms, etc.										
a. Quantity Shipped	Cu. meters	3.6E1	5.8E1	8.2E1	1.8E2	6.3E1	5.81	4.3E1	1.6E2	3.4E2
b. Type of Waste		EB	EB & SR	EB & Sludge	EB & SR	EB	EB & SR	EB & SR	---	---
c. Activity - Total Measured	Curies	3.8E1	6.2E1	5.7E1	1.6E2	5.0E1	9.0E1	3.9E1	1.8E2	3.4E2
d. Principle Nuclides Measured %										
Mn54	%	32	32	32	---	32	25	32	---	---
Co60	%	22	20	20	---	20	36	19	---	---
Fe55	%	19	3	3	---	---	20	11	---	---
Cr51	%	---	---	---	---	22	---	22	---	---
e. Type of Container (LSA, Type A, Type B, Lge Quantity)		LSA	LSA	LSA	LSA	LSA	LSA	LSA		
Container Volumes	Cu. meters	2.1E-1	2.1E-1	2.1E-1	2.1E-1	2.7E0	2.1E-1	4.8E0		
f. Solidification Agent		Cement	Cement	Cement	Cement	Cement	Cement	Cement	---	---
2. Dry Compressible Waste, Contaminated Equipment, etc.										
a. Quantity Shipped	Cu. meters	1.6E1	2.0E1	1.4E1	5.0E1	1.4E1	---	3.9E1	5.3E1	1.0E2
b. Activity - Total Measured	Curies	1.7E-1	4.3E-1	5.5E-1	1.2E0	1.3E-1	---	5.5E-1	6.8E-1	1.9E0
c. Principle Nuclides Measured/%										
Mn54	%	28	28	28	---	28	---	28	---	---
Co60	%	28	28	28	---	28	---	28	---	---
Fe55	%	16	16	16	---	16	---	16	---	---
d. Type of Container (LSA, Type A, Type B, Lge Quantity)		LSA	LSA	LSA	LSA	LSA		LSA		
Container Volume	Cu. meters	2.1E-1	2.1E-1	2.1E-1	2.1E-1	2.1E-1		2.1E-1		
e. Type of Waste		DAW	DAW	DAW	DAW	DAW	---	DAW	---	---

RWA - Richland, Washington
 BSC - Barnwell, South Carolina
 CN - Chem Nuclear Co.
 HN - Hittman Nuclear & Development Co.
 TSMT - Tri-State Motor Transit

ATTACHMENT A
REPORT OF RADIOACTIVE WASTE SUMMARY
 UNITS 1/2
 LASALLE COUNTY NUCLEAR POWER STATION

LRP-1110-3
 Revision 3
 November 19, 1986
 15

DATE	<u>DISPOSITION OF MATERIAL</u>		Type of Waste	Type of Container	Solidifi- cation Agent	Principle Nuclides	Shipment Volume (ft3)	Shipment Activity (mCi)	Volume Per Month (ft3)	Activity Per Month (mCi)
	TRANS CO.	BURIAL SITE								
2 Jul 86	HN	BSC	EB	LSA	Cement	Mn-54	105	3140.95	105	3140.95
2 Jul 86	TSMT	RWA	DAW	LSA	N/A	Cr-51	561.2	170.56	666.2	3311.51
7 Jul 86	HN	BSC	EB	LSA	Cement	Co-60	105	2962.48	771.2	6273.99
9 Jul 86	HN	BSC	EB	LSA	Cement	Fe-55	105	3217.36	876.2	9491.35
18 Jul 86	HN	BSC	EB	LSA	Cement	Co-58	105	3166.78	981.2	12658.13
21 Jul 86	HN	BSC	EB	LSA	Cement	Zn-65	105	3266.89	1086.2	15925.02
22 Jul 86	HN	BSC	EB	LSA	Cement	Fe-59	105	3150.20	1191.2	19075.22
24 Jul 86	HN	BSC	EB	LSA	Cement	Ni-63	105	3121.64	1296.2	22196.86
25 Jul 86	HN	BSC	EB	LSA	Cement	H-3	105	3372.56	1401.2	25569.42
28 Jul 86	HN	BSC	EB	LSA	Cement	C-14	105	3511.54	1506.2	29080.96
29 Jul 86	HN	BSC	EB	LSA	Cement	↓	105	2885.52	1611.2	31966.44
30 Jul 86	HN	BSC	EB	LSA	Cement		105	3154.96	1716.2	35121.44
31 Jul 86	HN	BSC	EB	LSA	Cement		105	3543.92	1821.2	38665.36

RWA - Richland, Washington
 BSC - Barnwell, South Carolina
 CN - Chem Nuclear Co.
 HN - Hittman Nuclear & Development Co.
 TSMT - Tri-State Motor Transit

ATTACHMENT A
REPORT OF RADIOACTIVE WASTE SUMMARY
 UNITS 1/2
 LASALLE COUNTY NUCLEAR POWER STATION

LRP-1110-3
 Revision 3
 November 19, 1986
 15

DATE	<u>DISPOSITION OF MATERIAL</u>		Type of Waste	Type of Container	Solidifi- cation Agent	Principle Nuclides	Shipment Volume (ft3)	Shipment Activity (mCi)	Volume Per Month (ft3)	Activity Per Month (mCi)
	TRANS CO.	BURIAL SITE								
1 Aug 86	HN	BSC	RB	LSA	Cement	Mn-54	105	3082.74	105	3082.74
4 Aug 86	HN	BSC	RB	LSA	Cement	Cr-51	105	3057.83	210	6140.57
7 Aug 86	TSMT	RWA	DAW	LSA	N/A	Co-60	689.6	431.90	899.6	6572.47
7 Aug 86	HN	BSC	RB	LSA	Cement	Fe-55	105	3104.64	1004.6	9677.11
8 Aug 86	HN	BSC	RB	LSA	Cement	Co-58	105	2748.32	1109.6	12425.43
12 Aug 86	HN	BSC	RB	LSA	Cement	Zn-65	105	3706.44	1214.6	16131.87
13 Aug 86	HN	BSC	RB	LSA	Cement	Fe-59	105	4516.46	1319.6	20648.33
14 Aug 86	HN	BSC	RB	LSA	Cement	Ni-63	105	3063.82	1454.6	23712.15
15 Aug 86	HN	BSC	RB	LSA	Cement		105	3905.82	1559.6	27617.97
18 Aug 86	HN	BSC	RB	LSA	Cement		105	3402.74	1664.6	31020.71
19 Aug 86	HN	BSC	RB	LSA	Cement		105	3785.05	1769.6	34805.76
20 Aug 86	HN	BSC	RB	LSA	Cement		105	3306.05	1874.6	38111.81
21 Aug 86	HN	BSC	RB	LSA	Cement		105	2852.12	2009.6	40963.93
22 Aug 86	HN	BSC	RB	LSA	Cement		105	4169.52	2114.6	45133.45
25 Aug 86	HN	BSC	RB	LSA	Cement		105	3823.80	2219.6	48957.25

RWA - Richland, Washington
BSC - Barnwell, South Carolina
CN - Chem Nuclear Co.
HN - Hittman Nuclear & Development Co.
TSMT - Tri-State Motor Transit

ATTACHMENT A
REPORT OF RADIOACTIVE WASTE SUMMARY
UNITS 1/2
LASALLE COUNTY NUCLEAR POWER STATION

LRP-1110-3
Revision 3
November 19, 1986
15

DATE	DISPOSITION OF MATERIAL		Type of Waste	Type of Container	Solidification Agent	Principle Nuclides	Shipment Volume (ft3)	Shipment Activity (mCi)	Volume Per Month (ft3)	Activity Per Month (mCi)
	TRANS CO.	BURIAL SITE								
26 Aug 86	HN	BSC	EB	LSA	Cement	Continued	105	3483.40	2324.6	52440.65
27 Aug 86	HN	BSC	EB	LSA	Cement	from	105	3243.36	2429.6	55684.01
29 Aug 86	HN	BSC	EB & SR	LSA	Cement	Previous	180	3239.14	2609.6	58923.15
29 Aug 86	HN	BSC	EB	LSA	Cement	Page	135	3302.16	2744.6	62225.31

RWA Richland, Washington
 BSC - Barnwell, South Carolina
 CN - Chem Nuclear Co.
 HN - Hittman Nuclear & Development Co.
 TSMT - Tri-State Motor Transit

ATTACHMENT A
REPORT OF RADIOACTIVE WASTE SUMMARY
 UNITS 1/2
 LASALLE COUNTY NUCLEAR POWER STATION

LRP-1110-3
 Revision 3
 November 19, 1986
 15

DATE	<u>DISPOSITION OF MATERIAL</u>		Type of Waste	Type of Container	Solidifi- cation Agent	Principle Nuclides	Shipment Volume (ft3)	Shipment Activity (mCi)	Volume Per Month (ft3)	Activity Per Month (mCi)
	TRANS CO.	BURIAL SITE								
2SEP86	HN	BSC	EB	LSA	Cement	Mn-54	105	3462.73	105	3462.73
4SEP86	HN	BSC	EB	LSA	Cement	Cr-51	105	4042.39	210	7505.12
4SEP86	HN	BSC	EB	LSA	Cement	Co-60	105	4143.69	315	11648.81
5SEP86	HN	BSC	EB	LSA	Cement	Fe-55	135	3094.08	450	14742.89
8SEP86	HN	BSC	EB	LSA	Cement	Co-58	105	3117.26	555	17860.15
12SEP86	TSMT	RWA	Sludge DAW	LSA	N/A	Zn-65	597	265.81	1152	18125.96
11SEP86	HN	BSC	EB	LSA	Cement	Ni-63	135	3030.42	1287	21156.38
12SEP86	HN	BSC	EB	LSA	Cement	Fe-59	105	3071.99	1392	24228.37
11SEP86	HN	BSC	EB	LSA	Cement	C-14	105	3015.51	1497	27243.88
15SEP86	HN	BSC	EB	LSA	Cement	H-3	105	2815.64	1602	30059.52
16SEP86	HN	BSC	EB	LSA	Cement	↓	105	2766.00	1707	32825.52
17SEP86	HN	BSC	EB	LSA	Cement		180	3519.56	1887	36345.08
18SEP86	HN	BSC	EB	LSA	Cement		135	3256.19	2022	39601.27
19SEP86	HN	BSC	EB	LSA	Cement		105	2827.20	2127	42428.47
22SEP86	HN	BSC	EB	LSA	Cement		105	2672.16	2232	45100.63

LRP-1110-3
Revision 3
November 19, 1986
15

DATE	DISPOSITION OF MATERIAL		Type of	Type of	Solidifi-	Principle	Shipment	Shipment	Volume	Activity
	TRANS CO.	BURIAL SITE	Waste	Container	cation Agent	Nuclides	Volume (ft3)	Activity (mCi)	Per Month (ft3)	Per Month (mCi)
26SEP86	TSMT	RWA	DAW SLUDGE	LSA	N/A	Continued	700.5	345.30	2932.5	45445.93
25SEP86	HN	BSC	EB	LSA	Cement	from	105	2870.84	3037.5	48316.77
26SEP86	HN	BSC	EB	LSA	Cement	Previous	105	3174.68	3142.5	51491.45
29SEP86	HN	BSC	EB	LSA	Cement	Page	135	3143.04	3277.5	54634.49
30SEP86	HN	BSC	EB	LSA	Cement		105	2432.77	3382.5	57067.26

RWA - Richland, Washington
 BSC - Barnwell, South Carolina
 CN - Chem Nuclear Co.
 HN - Hittman Nuclear & Development Co.
 TSMT - Tri-State Motor Transit

ATTACHMENT A
REPORT OF RADIOACTIVE WASTE SUMMARY
 UNITS 1/2
 LASALLE COUNTY NUCLEAR POWER STATION

LRP-1110-3
 Revision 3
 November 19, 1986
 15

DATE	<u>DISPOSITION OF MATERIAL</u>		Type of Waste	Type of Container	Solidifi- cation Agent	Principle Nuclides	Shipment Volume (ft3)	Shipment Activity (mCi)	Volume Per Month (ft3)	Activity Per Month (mCi)
	TRANS CO.	BURIAL SITE								
1OCT86	HN	BSC	EB	LSA	Cement	Mn-54	105	3122.32	105	3122.32
2OCT86	HN	BSC	EB	LSA	Cement	Cr-51	105	2887.04	210	6009.36
3OCT86	HN	BSC	EB	LSA	Cement	Co-60	105	3027.80	315	9037.16
6OCT86	HN	BSC	EB	LSA	Cement	Fe-55	135	2682.40	450	11719.56
7OCT86	HN	BSC	EB	LSA	Cement	Co-58	105	2446.40	555	14165.96
9OCT86	HN	BSC	EB	LSA	Cement	Zn-65	105	2750.36	660	16916.32
10OCT86	HN	BSC	EB	LSA	Cement	Ni-63	105	2654.48	765	19570.8
10OCT86	HN	BSC	EB	LSA	Cement	H-3	105	2776.88	870	22347.68
14OCT86	HN	BSC	EB	LSA	Cement	C-14	135	3272.92	1005	25620.60
15OCT86	HN	BSC	EB	LSA	Cement		105	2683.72	1110	28304.32
16OCT86	HN	BSC	EB	LSA	Cement		105	2589.20	1215	30893.52
17OCT86	HN	BSC	EB	LSA	Cement		105	2749.68	1320	33643.20
20OCT86	HN	BSC	EB	LSA	Cement		135	3015.20	1455	36658.40
23OCT86	TSMT	RWA	DAW Sludge Oil Filters		LSA	Cement	695.2	175.72	2150.2	36834.12
23OCT86	HN	BSC	EB	LSA	Cement		105	2228.8	2255.2	39062.92

LRP-1110-3
Revision 3
November 19, 1986
15

DATE	DISPOSITION OF MATERIAL		Type of Waste	Type of Container	Solidification Agent	Principle Nuclides	Shipment Volume (ft3)	Shipment Activity (mCi)	Volume Per Month (ft3)	Activity Per Month (mCi)
	TRANS CO.	BURIAL SITE								
28OCT86	HN	BSC	RB	LSA	Cement	Continued	105	2513.04	2360.2	41575.96
29OCT86	HN	BSC	RB	LSA	Cement	from	135	2872.12	2495.2	44448.08
30OCT86	HN	BSC	RB	LSA	Cement	Previous	105	2871.40	2600.2	47319.48
31OCT86	HN	BSC	RB	LSA	Cement	Page	105	2543.64	2705.2	49863.12

RWA - Richland, Washington
 BSC - Barnwell, South Carolina
 CN - Chem Nuclear Co.
 HN - Hittman Nuclear & Development Co.
 TSMT - Tri-State Motor Transit

ATTACHMENT A
REPORT OF RADIOACTIVE WASTE SUMMARY
 UNITS 1/2
 LASALLE COUNTY NUCLEAR POWER STATION

LRP-1110-3
 Revision 3
 November 19, 1986
 15

DATE	<u>DISPOSITION OF MATERIAL</u>		Type of Waste	Type of Container	Solidifi- cation Agent	Principle Nuclides	Shipment Volume (ft3)	Shipment Activity (mCi)	Volume Per Month (ft3)	Activity Per Month (mCi)
	TRANS CO.	BURIAL SITE								
5NOV86	HN	BSC	RB	LSA	Cement	Mn-54	105	2538.88	105	2538.88
6NOV86	HN	BSC	RB	LSA	Cement	Cr-51	105	2615.72	210	5154.6
7NOV86	HN	BSC	RB	LSA	Cement	Co-60	135	2675.88	345	7830.48
10NOV86	HN	BSC	RB	LSA	Cement	Fe-55	105	2672.42	450	10502.9
12NOV86	HN	BSC	RB	LSA	Cement	Co-58	105	2675.55	555	13178.45
13NOV86	HN	BSC	SR	LSA	N/A	Zn-65	170	26809	725	39987.45
13NOV86	HN	BSC	RB	LSA	Cement	Ni-63	105	2834.95	830	42822.4
14NOV86	HN	BSC	RB	LSA	Cement	H-3	135	2625.78	965	45448.18
17NOV86	HN	BSC	RB	LSA	Cement	C-14	105	2758.36	1070	48206.54
19NOV86	HN	BSC	RB	LSA	Cement	Fe-59	105	2855.08	1175	51061.62
20NOV86	HN	BSC	RB	LSA	Cement	Tc-99	180	3109.43	1355	54171.05
20NOV86	HN	BSC	SR	LSA	N/A	Pu-239	170	9619.60	1525	63790.65
21NOV86	HN	BSC	RB	LSA	Cement	Pu-241	105	2732.00	1630	66522.65
24NOV86	HN	BSC	RB	LSA	Cement	Sr-90	135	3290.60	1765	69813.25
25NOV86	HN	BSC	RB	LSA	Cement		105	3329.58	1870	73142.83

LRP-1110-3
Revision 3
November 19, 1986
15

[illegible]

RWA - Richland, Washington
 BSC - Barnwell, South Carolina
 CN - Chem Nuclear Co.
 HN - Hittman Nuclear & Development Co.
 TSMT - Tri-State Motor Transit

ATTACHMENT A
REPORT OF RADIOACTIVE WASTE SUMMARY
 UNITS 1/2
 LASALLE COUNTY NUCLEAR POWER STATION

LRP-1110-3
 Revision 3
 November 19, 1986
 15

DATE	<u>DISPOSITION OF MATERIAL</u>		Type of Waste	Type of Container	Solidifi- cation Agent	Principle Nuclides	Shipment Volume (ft3)	Shipment Activity (mCi)	Volume Per Month (ft3)	Activity Per Month (mCi)
	TRANS CO.	BURIAL SITE								
1DEC86	HN	BSC	EB	LSA	Cement	Mn-54	105	3025.20	105	3025.20
2DEC86	HN	BSC	EB	LSA	Cement	Cr-51	105	2653.60	210	5678.80
4DEC86	HN	BSC	SR	LSA	N/A	Co-60	170	4910.00	380	10588.80
4DEC86	TSMT	U.S. Ecology	DAW	LSA	N/A	Fe-55	605.2	150.73	985.2	10739.53
8DEC86	HN	BSC	EB	LSA	Cement	Co-58	105	2798.45	1090.2	13537.98
9DEC86	HN	BSC	EB	LSA	Cement	Zn-65	135	3144.40	1225.2	16682.38
10DEC86	HN	BSC	EB	LSA	Cement	Ni-63	105	2601.44	1330.2	19283.82
11DEC86	HN	BSC	EB	LSA	Cement	H-3	105	2484.48	1435.2	21768.30
12DEC86	HN	BSC	EB	LSA	Cement	C-14	105	2642.24	1540.2	24410.54
15DEC86	HN	BSC	EB	LSA	Cement	Fe-59	105	2654.48	1645.2	27065.02
16DEC86	HN	BSC	EB	LSA	Cement	Tc-99	135	3348.76	1780.2	30413.78
19DEC86	HN	BSC	EB	LSA	Cement	↓	105	2791.84	1885.2	33205.62
19DEC86	TSMT	U.S. Ecology	DAW	LSA	N/A		778.5	403.82	2663.7	33609.44
22DEC86	HN	BSC	EB	LSA	Cement		105	2768.72	2768.7	36378.16
30DEC86	HN	BSC	EB	LSA	Cement		135	2830.77	2903.7	39208.93



Commonwealth Edison
LaSalle County Nuclear Station
Rural Route #1, Box 220
Marseilles, Illinois 61341
Telephone 815/357-6761

DMB

PRIORITY ROUTING

First	Second
RA	RC
DRA	ETC
CRP	SGA
DHS	ML
ORSS	OL
DRMA	OT
	PAO

orig + 2

FHE

January 30, 1987

Mr. James G. Keppler
Regional Administrator
Directorate of Inspection and Enforcement
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

SUBJECT: LaSalle County Operating Report, NRC Docket Nos. 50-373 and 50-374

Dear Mr. Keppler:

Enclosed is the radioactive effluent report for July through December, 1986 for LaSalle County Nuclear Power Station.

One copy of this report is provided for your use and 39 copies are being submitted directly to the Director of the Office of Nuclear Reactor Regulation.

Included with Part 1 of the LaSalle County Station Operating Report, please find a copy of two memoranda describing a change to the LaSalle County Station Process Control Program. A copy is furnished to you in accordance with Technical Specification Section 6.7.

Sincerely,

G. J. Diederich
G. J. Diederich

Station Manager
LaSalle County Station

GJD/LRA/DWH/DRP/psk

Enclosure

IEAS
11
100