

March 26, 1983  
NRC/TMI-13-021

MEMORANDUM FOR: Harold R. Benton, Director  
Office of Nuclear Reactor Regulation  
  
Bernard J. Snyder, Program Director  
TMI Program Office

FROM: Lake H. Barrett, Deputy Program Director  
TMI Program Office

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Enclosed is the status report for the period of March 20, 1983, through March 26, 1983. Major items included in this report are:

- Liquid Effluents
- EPA and NRC Environmental Data
- Radioactive Material and Radwaste Shipments
- Submerged Demineralizer System Status
- EPICOR II Status
- Reactor Building Entries
- SDS Liner Shipments
- Leadscrew Shipment
- EPICOR II Prefilter Shipment
- Purification Demineralizer Disposal Status
- Public Meetings

- 2 -

Lake H. Barrett  
Deputy Program Director  
TMI Program Office

Enclosure: As stated

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OFFICE	IRNAME	DATE							

cc w/encl:  
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OGC  
Office Directors  
Commissioner's Technical Assistants  
NRR Division Directors  
NRR A/D's  
Regional Administrators  
IE Division Directors  
TAS  
EIS  
TMI Program Office Staff (15)  
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RI Division Directors  
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State Liaison, RI

OFFICE ▶	TMIPD <i>Jw</i>	TM12PS <i>zod</i>	TM12PS <i>Jw</i>	TMIPD <i>PC</i>	TMIPD <i>LB</i>		
SURNAME ▶	LGage/lmp	BO'Neill	Apasano	PC	LB		
DATE ▶	3/28/83	3/28/83	3/28/83	3/28/83	3/10/83		

NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

March 20, 1983 - March 26, 1983

Plant Status

Core Cooling Mode: Heat transfer from the reactor coolant system (RCS) to reactor building ambient.

Available Core Cooling Mode: Mini Decay Heat Removal (MDHR) system.

RCS Pressure Control Mode: Standby Pressure Control System.

Major Parameters (as of 5:00 AM, March 25, 1983) (approximate values)

Average Incore Thermocouples\*: 93°F

Maximum Incore Thermocouple\*: 134°F

RCS Loop Temperatures:

	A	B
Hot Leg	90°F	88°F
Cold Leg (1)	75°F	76°F
(2)	75°F	77°F

RCS Pressure: 64 psig

Reactor Building: Temperature: 64°F

Pressure: -0.1 psig

Airborne Radionuclide Concentrations:

5.6 E-8 uCi/cc H<sup>3</sup>  
(sample taken 3/23/83)

4.1 E-9 uCi/cc particulates  
(sample taken 3/23/83)

1. Effluent and Environmental (Radiological) Information

Liquid effluents from the TMI site released to the Susquehanna River after sampling and monitoring were within the regulatory limits and in accordance with NRC requirements and City of Lancaster Agreement.

During the period March 18, 1983, through March 24, 1983, the effluents contained no detectable radioactivity at the discharge point and individual effluent sources, which originated within Unit 2, contained no detectable amounts of radioactivity.

\*Uncertainties exist as to the exact location and accuracy of these readings.

2. Environmental Protection Agency (EPA) Environmental Data

- The EPA Middletown Office has not received the environmental Kr-85 analytical results for the samples which were taken subsequent to March 4, 1983. These results, which are being provided by the EPA's Counting Laboratory at Las Vegas, Nevada, will be included in a subsequent report.
- No radiation above normally occurring background levels was detected in any of the samples collected from the EPA's air and gamma monitoring networks during the period from March 16, 1983, through March 24, 1983.

3. NRC Environmental Data

- The following are the NRC air sample analytical results for the onsite continuous air sampler:

<u>Sample</u>	<u>Period</u>	<u>I-131 (uCi/cc)</u>	<u>Cs-137 (uCi/cc)</u>
HP-362	March 16 - March 23, 1983	<7.1 E-14	<7.1 E-14

4. Licensee Radioactive Material and Radwaste Shipments

- On March 22, 1983, one box containing scrape samples from the Unit 1 reactor building was mailed to Battelle, Columbus, Ohio.
- On March 22, 1983, one SN-1 shipping cask containing lead screw sections taken from Unit 2 was shipped to EG&G, Scoville, Idaho.
- On March 23, 1983, one CNSI-8-120-4 (Type B) shipping cask containing Unit 2 EPICOR Prefilter No. PF-33 was shipped to EG&G, Scoville, Idaho.
- On March 23, 1983, one CNSI-8-120-3 (Type B) shipping cask containing Unit 2 EPICOR Prefilter No. PF-29 was shipped to EG&G, Scoville, Idaho.
- On March 24, 1983, 93 drums of contaminated laundry from Units 1 and 2 were shipped to Interstate Uniform in New Kensington, Pennsylvania.
- On March 25, 1983, four steel liners containing solidified evaporator bottoms from Unit 1 were shipped to Chem Nuclear Systems, Barnwell, South Carolina.
- On March 25, 1983, one box containing a 500 ml reactor coolant drain tank sample from Unit 1 was sent via U.S. Mail to NWI Corporation, San Jose, California.

- On March 25, 1983, one box containing 1000 ml waste evaporator condensate storage tank monthly sample from Unit 1 was sent via U.S. Mail to Teledyne Labs, Westwood, New Jersey.
- On March 25, 1983, an SDS liner (D10018) was shipped to U.S. Department of Energy, Rockwell Hanford Operations Office, Richland, Washington.
- On March 25, 1983, 105 drums and 4 metal boxes containing LSA compacted and non-compacted trash from Units 1 and 2 were shipped to U.S. Ecology, Hanford burial site, Richland, Washington.

### Major Activities

1. Submerged Demineralizer System (SDS). SDS is currently processing water from the reactor building sump; performance parameters will be included in the next Weekly Status Report.
2. EPICOR II. EPICOR II is currently processing SDS effluents; its performance parameters will also be included in the next Weekly Status Report.
3. Reactor Building Entries. Four reactor building entries were completed during the week of March 20, 1983. Decontamination of the reactor building air coolers was the most man-hour intensive task during the entries. The reactor building air coolers were secured during the weekend of March 26-27, 1983, to support an experiment designed to assess whether the forced air circulation inside the reactor building is a factor in surface recontamination. Application of shielding to high radiation sources on the 305 ft. elevation was also continued.

Additional reactor underhead data-acquisition activities, which had been scheduled to commence in March, have been delayed. Safety evaluations and procedures for lowering primary system water level below the control rod drive mechanism (CRDM) interface flange and for removing the CRDM have not been finalized. The reactor building polar crane is required to remove the 40-ton missile shield above the CRDM prior to its removal. The crane will also be needed to lift the CRDM after the it is unbolted from its interface with the reactor vessel head. Prerequisite polar crane operating procedures and safety evaluations have not been completed for these tasks. Following an allegation of unsafe practices, a reassessment of the crane refurbishment program is being conducted, and a schedule for completion of the polar crane refurbishment is not available.

4. SDS Liner Shipments. The sixth SDS waste liner (D10018) was shipped from TMI to the Rockwell Hanford facility (Richland, Washington) on March 25, 1983. This 10-cubic foot zeolite liner, which contains approximately 5300 curies of mixed fission products (predominately as

Cs-137 and Sr-90), was loaded onsite with a catalytic recombiner to maintain non-combustible gas conditions during the handling and shipping period. The seventh SDS waste liner, D20028, in a group of twelve, is tentatively scheduled to be shipped on April 15, 1983.

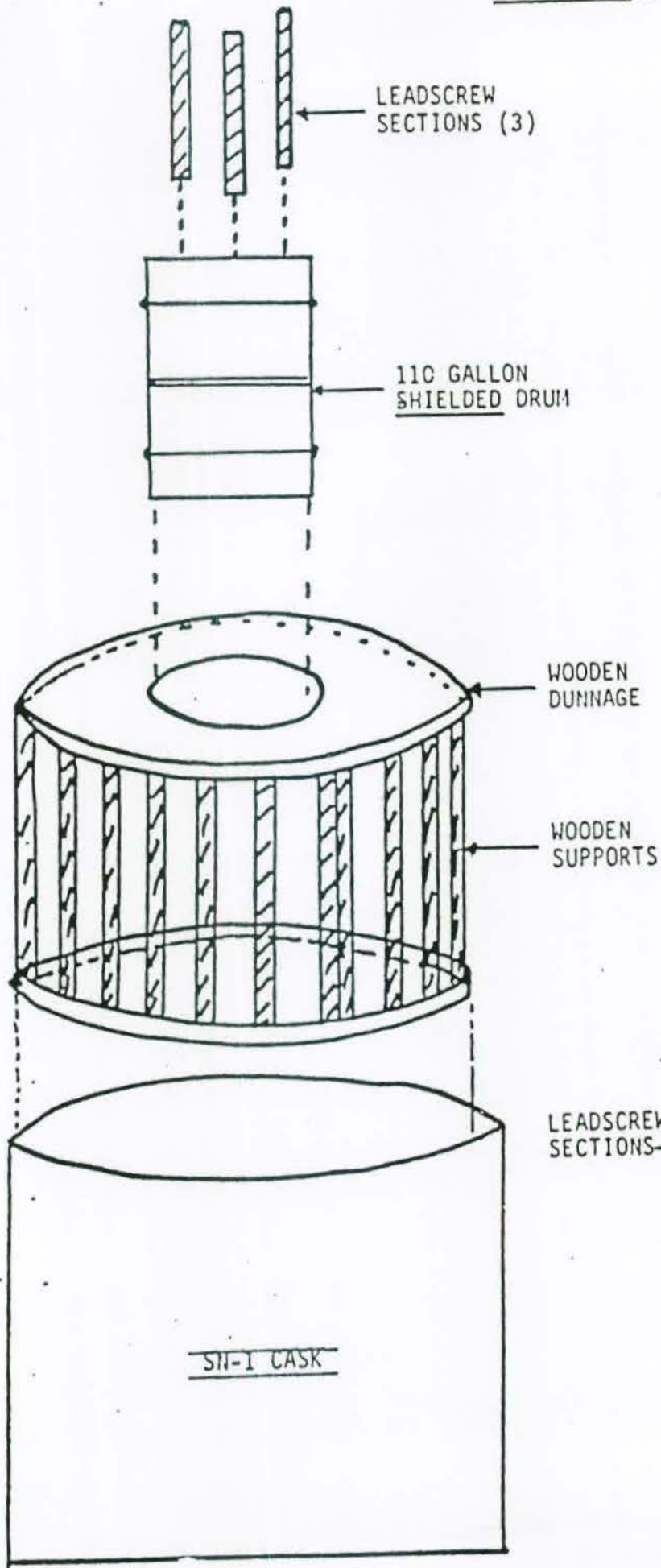
5. EPICOR II Prefilter (PF) Shipments. Two EPICOR prefilter shipments (PF-29 and PF-33) were made this week to the Idaho National Engineering Laboratory (INEL) in Scoville, Idaho. These shipments represent a total of 33 prefilters (out of a group of 50) that have been sent to INEL. No shipments are scheduled next week; they are awaiting the return of the Type "B" shipping cask to the TMI site.
6. Leadscrew Shipment to Idaho National Engineering Laboratories (INEL)

On Monday, March 21, 1983, three sections of the lower half of leadscrew H-8 were removed from the containment building, analyzed for radioisotopic content, and packaged for shipping to INEL. The lower half of leadscrew H-8 had been previously cut into two 4-foot sections, one 32-inch section, one 12-inch section, and two 9-inch sections, in November 1982. The 9-inch and 12-inch sections were subsequently shipped off site for analysis in December 1982. The three remaining sections were stored in PVC containers on the 305-foot elevation of the reactor building awaiting fabrication of transporter casks. After the necessary equipment was constructed, procedures developed, and personnel trained to complete the task, the three sections (which had maximum contact radiation readings of 35 R/hr, 8 R/hr, and 7 R/hr for the two 4-foot and one 32-inch section, respectively) were scanned for radioisotopic content using a SAI Mark 2 Collimated Spectrometer. Following scanning, the sections were placed in a lead-shielded 110-gallon drum, moved to a staging area in a transporter cask, and then repackaged in a SN-1 cask. On March 22, the SN-1 cask was shipped to INEL, Idaho Falls, Idaho. Attachment 1 is a drawing of the arrangement of the shipping containers.
7. Purification Demineralizer Disposal Status. Work is continuing on the fabrication and testing of a special mechanical sampler and guide sleeve for inserting a fiber-optics probe into the "A" purification demineralizer vessel (see the March 14, 1983, Weekly Status Report). The visual inspection and further sampling of the "A" vessel for ion-exchange resin material is tentatively scheduled for March 30, 1983. The shipment of the "B" purification demineralizer sample to ORNL has been delayed approximately one week.

Future Meeting

On April 5, 1983, Lake H. Barrett will meet with the Concerned Mothers of Middletown to discuss TMI related issues.

ATTACHMENT 1



TOP VIEW OF SN-1 SHIPPING CASK

