

April 30, 1984  
NRC/TMI-84-028

MEMORANDUM FOR: Harold R. Denton, 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 FOR  
April 22, 1984 - April 29, 1984

Data from effluent and environmental monitoring systems indicated no plant releases in excess of regulatory limits.

Other site activities this period included: preparations for head lift in late summer, reactor building air cooling system work and auxiliary and fuel handling building decontamination. (For more details see appropriate paragraphs below.)

Significant items covered in the enclosure are:

- Reactor Building Activities Prior to Head Lift Removal
- Auxiliary and Fuel Handling Building Activities
- Waste Management Activities
- Public Meetings

Data summary sheets included in this report are:

- Liquid Effluent Data
- Environmental Data
- Radioactive Material/Radwaste Shipment Data
- Plant Status Data

ORIGINAL SIGNED BY:  
Lake H. Barrett  
Deputy Program Director  
TMI Program Office

Enclosure: As stated

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SURNAME ▶	DCollins	MBasano	PGrant	LBarrett		
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## ENCLOSURE

### REACTOR BUILDING ACTIVITIES:

Work inside the reactor building is focused on preparations for reactor vessel head removal. Head removal is scheduled for August 1984. Major head lift prerequisites, scheduled to be completed prior to August, include the following:

- Auxiliary fuel handling bridge modification and bridge repositioning to the north end of the refueling canal;
- Control rod drive lead screw parking (raise lead screws into control rod drive housings);
- Radiation shielding installation;
- Refueling canal preparation for flooding and water processing (contingency for unanticipated high radiation during head removal);
- Plenum misting system installation (contamination control system);
- Develop underhead contamination control cover (contamination control system);
- Install head lift TV camera and radiation monitoring systems;
- Internals indexing fixture modifications and preparations for installation (fixture will be used as shield water container above the reactor vessel).

Reactor building entries are typically conducted four days per week. On entry days, work inside the reactor building is usually continuous during the day shift.

The reactor coolant system has been pressurized to 60 psig  $\pm$  10 psig. The coolant is being processed in 50,000 gallon batches through the SDS ion exchangers to reduce radioactivity levels in preparation for the reactor vessel head removal.

### AUXILIARY AND FUEL HANDLING BUILDING ACTIVITIES:

Maintenance work to restore the "A" decay heat pump to operable status continued this week. Decontamination work continued on the tanks in the "A" fuel pool. The first of six process water storage tanks is scheduled to be removed from the "A" pool in mid-May. Steady progress continues to be made on the reactor building cooling (chiller) system installation.

### WASTE MANAGEMENT ACTIVITIES:

The submerged demineralizer system (SDS) processed Batch S-081 (30,188 gallons) between April 17 and 20, 1984. SDS batches S-082 (573 gallons), S-083 (564 gallons), S-084 (499 gallons) and S-085 (105 gallons) were processed this week supporting the "A" fuel pool tank farm decontamination. The EPICOR II system remained shutdown during this period.



PUBLIC MEETING:

On April 26, 1984, Lake Barrett addressed the staff of the Center for Devices and Radiological Health of the Food and Drug Administration on the status of TMI-2 cleanup.

## APPENDIX 1

### LIQUID EFFLUENT DATA

#### GPU Nuclear

Based on sampling and monitoring, liquid effluents from the TMI site released to the Susquehanna River were determined to be within regulatory limits and in accordance with NRC requirements and the City of Lancaster Agreement.

During the period April 20 through 26, 1984, the effluents contained no detectable radioactivity at the discharge point. Individual effluent sources originating within Unit 2 contained minute amounts of radioactivity. Calculations indicate that less than  $2 \text{ E-}6$  (0.000002) of a curie of Cs-137 and Sr-90 were discharged.

A corrected report for the period February 3 through 9, 1984 has been made. The effluents for the period contained no detectable radioactivity at the discharge point. Individual effluent sources originating within Unit 2 contained minute amounts of radioactivity. Calculations indicate that less than  $3.1 \text{ E-}6$  (0.0000031) of a curie of Cs-137 and Sr-90, and less than  $8.1 \text{ E-}5$  (0.000081) of a curie of tritium (H-3) were discharged.

#### Environmental Protection Agency

Lancaster Water Samples:	7 samples
Period Covered:	April 8 - April 14, 1984
Results:	Gamma Scan Negative
TMI Water Samples:	7 samples
Period Covered:	April 7 - April 14, 1984
Results:	Gamma Scan Negative

APPENDIX 2

ENVIRONMENTAL DATA

Environmental Protection Agency

Kr-85, air particulate and gamma rate analyses are all performed by the EPA staff at Middletown. EPA results for these analyses are released monthly. These results will be reported here as they become available from EPA.

NRC Environmental Data

Results from the NRC continuous air sampler monitoring of the TMI site environment are as follows:

<u>Sample</u>	<u>Period</u>	<u>I-131</u> <u>(uCi/cc)</u>	<u>Cs-137</u> <u>(uCi/cc)</u>
HP-416	April 19, 1984 - April 26, 1984	<1.1 E-13	<1.1 E-13



### APPENDIX 3

#### RADIOACTIVE MATERIALS/RADWASTE SHIPMENT DATA

- On April 23, 1984, two Unit 1 steel liners containing solidified radioactive waste evaporator bottoms were shipped to the Chem-Nuclear, Inc. burial facility at Barnwell, South Carolina.
- On April 23, 1984, a steel drum containing Unit 1 sample materials was shipped to Babcock and Wilcox at Lynchburg, Virginia.
- On April 24, 1984, four Unit 1 steel liners containing solidified radioactive waste evaporator bottoms were shipped to the Chem-Nuclear, Inc. burial facility at Barnwell, South Carolina.
- On April 25, 1984, 72 drums of contaminated laundry from Unit 1 and Unit 2 were shipped to Interstate Uniform Service, New Kensington, Pennsylvania.
- On April 25, 1984, two Unit 1 steel liners containing solidified radioactive waste evaporator bottoms were shipped to the Chem-Nuclear, Inc. burial facility at Barnwell, South Carolina.

APPENDIX 4  
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: SPC

Major Parameters as of 6:00 AM, April 27, 1984 (approximate values):

Average Incore Thermocouples\*: 83°F  
Maximum Incore Thermocouple\*: 141°F

RCS Loop Temperatures:

	A	B
Hot Leg	71°F	75°F
Cold Leg (1)	63°F	65°F
(2)	69°F	63°F

Reactor Core Decay Heat: 17.5 Kilowatts

RCS Pressure: 61 psig

Reactor Building: Temperature: 64°F  
Pressure: -0.2 psig  
Airborne Radionuclide Concentrations:

3.7 E-8 uCi/cc H<sup>3</sup> (Tritium) (LLD)  
(sample taken 4/23/84)

1.4 E-9 uCi/cc particulates  
(predominately Cs-137)  
(sample taken 4/23/84)

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