



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

April 28, 1980
NRC/TMI-80-074

MEMORANDUM FOR: H. R. Denton, Director,
Office of Nuclear Reactor Regulation
B. J. Snyder, Program Manager, TMI Program Office

FROM: J. T. Collins, Deputy Program Manager,
TMI Program Office

SUBJECT: NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Enclosed is the status report for the week of April 19-25, 1980.

John T. Collins
John T. Collins
Deputy Program Manager
TMI Program Office

Enclosure: As stated

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NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of: April 19 - 25, 1980

Plant Status

Core Cooling Mode: Cyclic natural circulation in the "A" reactor coolant system (RCS) loop via the "A" once through steam generator (OTSG), steaming to the main condenser, and RCS loop-A and B cyclic natural circulation to reactor building ambient.

Available Core Cooling Modes: OTSG "B" to the main condenser; long term cooling "B" (OTSG-B); decay heat removal.

RCS Pressure Control Mode: Standby Pressure Control (SPC) System.

Backup Pressure Control Mode: Makeup system in conjunction with letdown flow (Emergency use only due to RCP seal injection isolated due to suspected leaks in system).

Major Parameters (As of 0400, April 25, 1980) (approximate values)

Average Incore Thermocouples: 143°F

Maximum Incore Thermocouple: 183°F

RCS Loop Temperatures:

	A	B
Hot Leg	146°F	150°F
Cold Leg (1)	107°F	81°F
(2)	124°F	83°F

NOTE: A loop recovering from flow period ("burp")

RCS Pressure: 200 psig (Heise)

Pressurizer Temperature: 302°F (Saturation Pressure 69 psig)

Reactor Building: Temperature: 80°F

Pressure: -.44 psig (Heise)

Water level: Elevation 290.5 ft. (8.0 ft. from floor) via decay heat system

Elevation 290.1 ft. via penetration 401 manometer

Environmental & Effluent Information

1. Liquid effluents from TMI-1 released to the Susquehanna River, after processing, were within the limits specified in Technical Specifications.
2. No liquid effluents were discharged from TMI-2.
3. Results from EPA monitoring of the environment around the TMI site were:
 - EPA environmental stations registered background levels for air particulate and water samples.

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- Gas air sample results (Kr-85) for the period April 15-19, 1980, were: Bainbridge - 22 pCi/m³, Middletown - 19 pCi/m³, and TMI Observation Center - 38 pCi/m³. EPA states that samples collected in the vicinity of TMI in recent months show background levels of Kr-85 to be in the range of 20-40 pCi/m³ of air.

NOTE: The Kr-85 results reported in the Weekly Status Report dated April 21, 1980, were reported with improper units; the results of 34 pCi/l and 24 pCi/l should be changed to 34 pCi/m³ and 24 pCi/m³.

- For the period April 21-24, 1980, direct radiation (gamma) readings showed no levels above background.
4. Radwaste shipments off site were as follows:
- On Monday, April 21, 1980, a Unit 2 reactor coolant sample was sent to the B&W Lynchburg Research Center, Lynchburg, Virginia.
 - On Thursday, April 24, 1980, a sample of EPICOR II effluent was sent to the Maryland State Department of Health.
 - On Friday, April 25, 1980, an air sample filter was sent to Teledyne Laboratory, Westwood, New Jersey.
5. EPICOR II processing status: (Auxiliary building approximate quantities)
- | | |
|-----------------------------|-----------------|
| Amount processed this week: | 25,000 gallons |
| Amount processed to date: | 225,000 gallons |
| Amount to be processed: | 220,000 gallons |

Major Activities (Past and Present)

1. The reactor coolant system remains at the first plateau (200 psig) in the depressurization plan to 100 psig. Results of the April 21, 1980, sample indicated total gas at 42 cc/kg (an increase of 31 cc/kg from previous sample results). The licensee suspects an inleakage into the sample container during shipment since the oxygen and nitrogen concentrations increased in the same proportion that oxygen and nitrogen exist in air. The hydrogen concentration remained at approximately 12 cc/kg. The licensee intends to take another sample on April 28, 1980, to verify sample results before proceeding on with the depressurization plan. Review of this area by the onsite staff is ongoing.
2. On April 22, 1980, at 5:00 p.m., the National Institute of Occupational Safety and Health (NIOSH) notified the NRC of possible modifications in the personnel respiratory protection system which would be used by the licensee for initial containment entry. The NRC requested NIOSH to perform examinations of this respiratory protection equipment to determine the status of equipment certification. On April 23, 1980, NIOSH representatives arrived at the TMI site and examined the

respiratory equipment in question, and determined that the manufacturer had performed modifications which were not previously tested and certified by NIOSH. On this basis, the Deputy Program Manager notified the licensee that no entry would be made until the breathing equipment can be retested and certified by NIOSH.

NIOSH representatives are currently examining and testing a sample of the licensee's respiratory protection equipment to determine adequacy of these modifications and status of equipment certification by NIOSH. This test is expected to be completed within the next two weeks. Containment entry is now postponed pending completion of NIOSH testing and certification of these modifications.

3. GROUND WATER MONITORING PROGRAM STATUS. All eight ground monitoring wells are functional. Samples were taken from these wells daily from April 11 to April 18, 1980. Composite, split samples were sent to four laboratories for analysis. The tritium analysis from the participating laboratories is included in Table 1. No other radioactive isotopes were identified in the samples. Based on the consistency of the daily sample results, sampling frequency will be reduced to once per week. The NRC had a concurrent sample collected from all wells on April 17, 1980, for independent analyses by the NRC Region I laboratory. The gamma isotopic analysis performed by the NRC Region I showed no levels above Lower Limits of Detection (LLD). The NRC Region I analysis confirmed tritium levels in well water between 446 and 985 pCi/l. These analytical results are consistent with the previously reported licensee's data and continued to show tritium levels above natural background (200-300 pCi/l).

Based on sample trends to date, and the relatively low tritium content in the well water, it was agreed that well water would be pumped directly to the storm drains if sample results were available from water pumped during the previous week.

The source of the brown color in wells #2, #3, and #8 has not been identified. Test results to date have not identified anything in the water which would prohibit discharge to the river. The NRC has requested a copy of all brown water test results. The test results will be forwarded to the PA-Department of Water Resources by the licensee to determine whether the water meets state criteria for discharge to the river.

Seven additional observation wells are being drilled in various locations around the TMI-2 reactor building. It is hoped that the observation wells will help identify the source of the higher tritium levels in wells #2, #3, and #8. Observation well drilling commenced on April 22, 1980. Barring weather problems and equipment failure, one observation well should be completed each day. Five observation wells will be drilled to bedrock. The two observation wells west of the reactor building will be drilled 15 feet into the bedrock to detect any potential water migration through the bedrock.

The licensee considers that background tritium activity in the river surrounding TMI is 200 - 500 picocuries per liter. EPA records examined by the NRC indicate that background tritium in the general area is 200 picocuries per liter.

The next ground water monitoring meeting is scheduled for 10:00 a.m. on Thursday, May 1, 1980.

Future Evolution

No firm evolutions are planned other than addressed above under Major Activities.

Meetings Held with Public Officials and Interested Groups

1. On April 21, 1980, J. Collins met with representatives of PA-DEP and DOE to discuss the status of the Community Monitoring Program.
2. On April 23, 1980, H. Denton, J. Collins, T. Elsasser, and E. Bretthauer, EPA, attended a meeting at 9:30 a.m. in Camp Hill with the Presidents of the Medical Society in the 5th Consular District.
3. On April 23, 1980, J. Collins, T. Elsasser and E. Bretthauer, EPA, conducted a briefing at 7:00 p.m. in Mount Joy for elected officials from the following communities: Conewago Township (East Shore), Conoy Township, East Donegal Township, Elizabethtown, Mount Joy, Mount Joy Township, West Donegal Township, the City of Lancaster, and Lancaster County. A total of 22 officials were invited; 17 attended.
4. On April 24, 1980, at 9:00 a.m., H. Denton, J. Collins, T. Elsasser and E. Bretthauer, EPA, met with the Chamber of Commerce heads from: Harrisburg, Lancaster, Lebanon, York and the West Shore. Approximately 100 people attended.
5. On April 24, 1980, H. Denton, T. Elsasser and E. Bretthauer, EPA, met with the Mayor of York.
6. On April 24, 1980, H. Denton, B. Snyder, T. Elsasser and E. Brettauer, EPA, met with various civic leaders and interested citizens from the Lebanon area. Approximately 120 people attended.
7. On April 24, 1980, at 7:00 p.m., J. Collins conducted a briefing in Hummelstown for officials from the following communities: Harrisburg, Hershey, Hummelstown, Lower Paxton Township, Paxtang, Penbrook, South Hanover Township, and South Londonderry Township. A total of 22 officials were invited; 2 attended.
8. On April 26, 1980, J. Collins met with Congressman Ertel and representatives from Met-Ed to discuss the issue of venting the TMI-2 reactor building.

Future Meetings

1. On April 28, 1980, J. Collins will appear on a talk program on WLBR radio, Lebanon to answer questions from listeners about the cleanup operations.
2. On April 28, 1980, at 6:30 p.m., J. Collins will speak to the Elizabethtown Kiwanis Club on the cleanup operations at TMI.
3. On April 28, 1980, at 7:30 p.m., J. Collins, T. Elsasser and E. Bretthauer, EPA, will meet with representatives from area school boards at the Middletown High School.
4. On April 30, 1980, at 9:00 a.m., J. Collins, T. Elsasser and E. Bretthauer, EPA, will meet in Middletown with religious leaders from the Harrisburg area.

5. On April 30, 1980, at 1:30 p.m., J. Collins, T. Elsasser and an EPA representative will meet with the York County Commissioner in York.
6. On April 30, 1980, at 4:20 p.m., J. Collins and T. Elsasser will meet with teachers from Northeastern Senior High School in Manchester.
7. On May 1, 1980, J. Collins will appear on a talk program on WAHT radio, Lebanon, called "Two Way Radio" to answer questions from listeners concerning the cleanup operations.
8. On May 2, 1980, at 9:30 a.m., J. Collins and T. Elsasser will meet with the Mayor of York.
9. On May 2, 1980, J. Collins and B. Snyder will brief the ACRS on the status of the cleanup operations at TMI and the status of the Programmatic Environmental Impact Statement.
10. On May 5, 1980, J. Collins will address the 9th grade Civic Classes at East Junior High School, Harrisburg.
11. On May 5, 1980, at 7:00 p.m., J. Collins, T. Elsasser and E. Bretthauer, EPA, will conduct a briefing in Manchester for officials from the following communities: Conewago Township (West Shore), Dover Township, East Manchester Township, Hellam Township, Manchester, Manchester Township, Mount Wolf, Springettsburg, Warrington Township, and York Haven.
12. On May 8, 1980, J. Collins will address the Lower Swatara Lions Club at 6:30 p.m. at the Skyways Inn.