

MEETING MINUTES

*File
Containment
Purge*

50-320

Subject: TMI-2 Reactor Building Purge

Date: March 5, 1980

Place: TMI-2, Harrisburg, Pennsylvania

Present: GPU

OTHER

M. P. Morrell
B. G. Smith
J. A. Brummer

R. Greenwood (Recovery Engineering)
G. Eidam (EG&G)
T. Lazo (Bechtel)
R. A. Aldred (ALARA)
J. Tate (GAI)

Purpose: To update purge program task schedules and determine the progress being made to complete the tasks.

Action Required:

1. Brummer: Place HPR-227 (RB air sampling panel) in operation. Due 3/15/80.
2. Morrell: Submit new RB sampling procedure to Elam for review. Due 3/7/80.

Discussion:

1. HPR-219A will not be moved to a different location and its readout will not be moved to the control room. The cable from the monitor to the readout console is not properly qualified to be pulled from the control room through the cable spreading room. Relocation of HPR-219A and its readout is not considered essential for conduct of the purge.
2. The pump for HPR-227 must be replaced. J. Brummer is looking for a suitable replacement pump. If a new pump is not obtained, a pump already available (in stock) will be installed. See action item #1 above.
3. The purge procedure and system startup/test procedure are at the NRC for review.
4. An expanded description of the purge REMP program is attached.
5. HPR-229 changes have been completed. Calibration will be complete by 3/15.
6. ECM 430 is scheduled to be completed by 3/15.
7. The next purge meeting will be held at 10:30 a.m. in the Trailer 105 conference room on March 19.

M. P. Morrell

M. P. Morrell

MPM:gp
Att.

RB PURGE TASK LIST

JOB	RESPONSIBILITY	DUE DATE
1. Complete hookup of purge rate computer program.	Completed	
2. Submit purge request to NRC.	Completed	
3. Order and receive materials for latest ECM changes.	M. Morrell	March 15
4. Test purge program/computer hookup.	K. Woodard	On Hold
5. Provide air sample and continuous radiation monitoring through R626.	Completed	
6. Provide control room-to-auxiliary bldg. communication for operation of AH-V36.	J. Brummer	March 15
7. Obtain approval for procedure for startup/test of system modifications.	M. Morrell	March 22
8. Check operability of valve AH-V5.	Completed	
9. Set up off-site monitoring.	W. Riethle	March 31
10. Calibrate stack monitor HPR-219A. Calculate and set HPR-219A alarm setpoint.	J. Brummer	March 15
11. Replace charcoal and H ₂ control purge train filter.	Completed	
12. Obtain approval for procedure to purge RB.	M. Morrell	March 15
13. Check calibration/relibrate instruments AH-RTD 5080, AH-FE 5080; AH-DPI-5087, 88, 89, 90; AH-DPS 5091; AH-DPIC 5058.	J. Brummer	March 15
14. Recommission auxiliary building and fuel handling building filter trains.	C. Montgomery	March 31
15. Complete ECM modifications to system: 1. Replace fan. 2. Add gamma probe to filter housing 3. Add AH-V7/fan interlock. Put AH-V7 control in control room 4. Add interlock to close AH-V3A & B on high RB pressure. 5. Add hand jog control for AH-V36. Put AH-V36 control in control room. 6. Add fan trip on high HPR-229 reading, loss of power to HPR-229, or high vacuum in filter plenum. 7. Add tubing to run from filter plenum drain to the floor drain.	M. Morrell	March 15

RB PURGE TASK LIST

JOB	RESPONSIBILITY	DUE DATE
16. Uncap the vent stack	C. Montgomery	March 31
17. Train operators.	P. Deltete	March 31
18. Modify HPR-229 to measure 1.0 μ Ci/ml Kr-85 and calibrate HPR-229	J. Brummer	March 15
19. Calculate alarm setpoint for HPR-229 and set trip point.	J. Brummer	March 15
20. Perform leak/operability tests for non-modified portions of system (includes leak test from AH-V25 to AH-V36 and valve/damper operability check).	Incorporated into Items 15 and 21	
21. Test modifications in accordance with startup/test procedure.	S. Kakarla	March 31
22. Hook up TWG-AM-5 as a backup for HPR-219A. Move HPR-219A readout to the control room. Move the HPR-219A monitor to the Aux. Bldg. roof.	Will not be completed. Not essential for purge.	

Inter-Office Memorandum



Date: February 29, 1980
WER #168

Subject: THREE MILE ISLAND NUCLEAR STATION
UPDATE ON ENVIRONMENTAL MONITORING PROGRAM
FOR THE UNIT 2 CONTAINMENT PURGE

To: M. Morrell

Location: TMI

Pursuant to W. E. Riethle's commitment to R. F. Wilson on February 27, 1980, the following represents an update on our proposed monitoring program.

I. TLD Monitoring

A. System Description

1. TLDs

(a) Model

Panasonic UD 801 series

(b) TLD specifications

The TLD is described as a composite dosimeter including four (4) TL elements and radiation shields. Each element is described as follows:

<u>Element</u>	<u>Application</u>	<u>Phosphor</u>	<u>Shield</u>	<u>Reading Range</u>
1	skin dose	$\text{Li}_2\text{B}_4\text{O}_7:\text{Cu}$ (15mg/cm ²)	thin window (10mg/cm ²)	1.0 mrem \approx 1000 rem
2	whole body (10kev \approx 10MeV)	$\text{Li}_2\text{B}_4\text{O}_7:\text{Cu}$ (15mg/cm ²)	plastics (300mg/cm ²)	10 mR \approx 1000 R
3	whole body (30kev \approx 10MeV)	$\text{CaSO}_4:\text{Tm}$ (15mg/cm ²)	lead & plastics (700mg/cm ²)	1 mR \approx 200 R
4	whole body (30kev \approx 10MeV)	$\text{CaSO}_4:\text{Tm}$ (15mg/cm ²)	lead & plastics (700mg/cm ²)	1 mR \approx 200 R

2. Associated Hardware

(a) Model UD-710A Automatic Reader

(b) Model UD-702A Manual Reader

(c) Model JD-840U Microcomputer with software

(d) Model TI-745 Printer

B. Monitoring

1. Sites

The normal complement of seventy two (72) REMP sites will be utilized as monitoring points. In addition to the required REMP TLDs at these locations, supplementary units will be in place and dedicated for purge data acquisition. The number dedicated at each site will be four (4), thus, two (2) badges per sampling effort shall be taken (with replacement) with two (2) remaining in the field for assessment of the integrated dose over the entire purge period.

In anticipation of certain sectors coming under the influence of the plume for a greater part of the purge period, additional badges will be assigned to these areas.

Several locations on site will be selected for placement of additional Panasonic TLD monitors.

2. Frequency of Sampling

As a minimum, the sampling frequency will be once per week. For the initial first week of the purge, all seventy two (72) sites will be sampled (one (1) set of two (2) TLD/sample/site). Subsequent sampling sites will be in those sectors coming under the influence of the plume during the presampling period, plus a sector on either side, thus bracketing the affected area. The on-site Panasonic TLDs will be sampled weekly. Control samples will be obtained from those sectors whose location is known to be in the least prevalent wind direction during each sampling period. In addition, background data will be obtained at each site prior to the purge, and compared to historical data for trends, anomalies, and to provide a data base for retrospective analysis of purge data.

II. Air Sampling for Kr-85

A. Equipment

1. Evacuated "watermelon" air samplers will be utilized for obtaining grab air samples.

B. Methods

1. An individual(s) will be dispatched, via two-way communications, to the projected plume touch down area. The air sampler will be placed and operated such that a grab sample will be obtained over a 15-20 minute period while immersed in the plume. The sample will then be sent to Teledyne Isotopes for analysis of Krypton content.

For purposes of dispatching the sampling team, a CRT terminal capable of projecting plume direction overlaid on topographic maps will be utilized. Hourly updates of plume direction and touch down area will be obtained and disseminated to field sampling teams for appropriate action.

III. Real Time Monitors

A. Reuter-Stokes Environmental Radiation Monitors

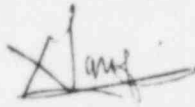
1. Reuter-Stokes Model RSS-111 monitors will be utilized in the monitoring program for real time assessments. The program is currently being finalized and will be presented in a final report.

B. Other

1. Additional systems for providing real time capabilities during the purge are being explored and investigated. System(s) found to be reliable and of value will be incorporated into the monitoring program and presented in a final report.

Our offices will serve as the central control center for the environmental monitoring program. Data obtained from the field monitoring equipment will be collected, collated, and analyzed by the Environmental Impact Assessment Group.

I will provide a complete draft copy of our monitoring plans including materials, methods, and procedures for your review in the near future. If I may provide additional information in the interim, please contact me at extension 8582 or 8581, Trailer 186.



G. G. Baker, Ph.D.

GGB/sal

cc: R. W. Heward
W. E. Riethle
J. R. Thorpe
R. F. Wilson
File: 2291.6