

AP 1001

Form 1001-8

Three Mile Island Nuclear Station
Special Operating Procedure

SIDE 1

SOP No. 7-32
(From SOP Log Index)Unit No. 2

Date _____

NOTE: Instructions and guidelines in AP 1001 must be followed when completing this form.

Rev 3

1. Title Leaking Make-Up Tank To R.B.
2. Purpose (include purpose of SOP) 1. To provide method to vent the makeup tank
(2) To define the to below an explosion tank as it enters the R.B.

3. Attach procedure to this form written according to the following format.

A. Limitations and Precautions

1. Nuclear Safety
2. Environmental Safety
3. Personnel Safety
4. Equipment Protection

attached

B. Prerequisites

C. Procedure

4. Generated by
- R. Threw
- Date
- 4/11/79

5. Duration of SOP - Shall be no longer than 90 days from the effective date of the SOP or (a) or (b) below - whichever occurs first.

(a) SOP will be cancelled by incorporation into existing or new permanent procedure submitted by _____ ☐(b) SOP is not valid after _____ ☐

(fill in circumstances which will result in SOP being cancelled)

6. (a) Is the procedure Nuclear Safety Related?

If "yes", complete Nuclear Safety Evaluation. (Side 2 of this Form) Yes ☐ No ☐

- (b) Does the procedure affect Environmental Protection?

If "yes", complete Environmental Evaluation. (Side 2 of this Form) Yes ☐ No ☐

- (c) Does the procedure affect radiation exposure to personnel? Yes
- ☐
- No
- ☐

NOTE: If all answers are "no", the change may be approved by the Shift Supervisor. If any questions are answered "yes", the change must be approved by the Unit Superintendent.

7. Review and Approval

Approved - Shift Supervisor B. W. N. A. Spence 4/12/79Reviewed - List members of PORC contacted R. N. D. Dail 4-12-79ALBERT R. Spence 4-12-79NAC 4/12/79Approved - Unit Superintendent Carl E. Gatto 4-12-79

8. SOP is Cancelled

Shift Supervisor/Shift Foreman

Date

130 149

A. General Notes

1. All temporary valves installed in this procedure or installed in a previous procedure shall be identified using the valve numbers on sketch 1 and 2. Permanent tags shall be used to make this identification.

B. Disconnection of Temporary Makeup tank Vent rig from BS-PS-3988.

1. Notify Control Room when installation procedure is to be performed, a 30 psig. ES pressure switch will be isolated. Obtain permission to proceed.
2. Shut BS-V-147 Check Shut MV-V-134.
3. Disconnect tubing from BS-PS-3988.
Notify Control Room. Open BS-V-147.
4. Modify tubing to provide "T" connection and isolation valve as indicated on sketch 1.

B. 1. Modifying Vent line to Accommodate Shielding.

1. Attach portable N_2 reg. to connection at WDG-V142B

2. Shut or Check Shut:

WDG-T-V1 _____ WDG-T-V6 _____

WDG-T-V2 _____ SHU-T-V4 _____

WDG-V-142B _____ WDG-V-188A _____

WDG-V-24 _____ WDG V-170 _____

WDG-V-32 _____ WDG V-33 _____

WDG V-188B _____

3. Open WDG-V143B _____ Establish a positive N_2 press. Then open WDG-V142B WDG-T-V7 and BS-V149. Purge the line for 15 minutes.

4. Secure Nitrogen flow by shutting WDG-T-V7 and BS-V149. Remove portable N_2 reg. Shut WDG-V142B and WDG-V143B.

5. Modify vent line so that it is routed along floor and cover with shielding. Shield with 2 layers of lead blankets or equivalent. for 10 ft either side of the sample area and by other identified walls.

6. Install Flame arrester as indicated in sketch 1. Verify piping to which reg is connected to be grounded.

7. Shut or check shut WDG-V143B _____
and WDG V142B _____.

Note: Commitments made herein will be fork
tested in section C.

C. Reconnection of MU Tank Vent to temporary Waste Gas Decay TK. Vent connection as shown on sketch 1 and SOP 2-5. This step must follow Step B.1.

1. a. Shut or check shut the following valves:

MU-V134 _____	MU-V13 _____
WDGT-V6 _____	SNU-185 _____
WDGT-V7 _____	

b. Open WDG-T-V-10 _____

2. Remove cap and correct Vent rig removed in Step B above to WDG-T-V6. Ensure tubing can be laid on deck and shielded with lead. Replace all P-tubing with oxygen tubing.

3. Attach N₂ test rig as shown in Sketch 1. "T" connection installed in Step B.3.

4. Gay relief valve NM-R7. Adjust NM-V54 as necessary to obtain test pressure at NM-V54. Connect. Check open NM-V179.

5. Open WDG-T-V6 and leak test connections to 100 psig ± 10 with N₂ Test rig. DO NOT USE Air AS A SUBSTITUTE FOR N₂
close MU-T-V4 _____ 130 153

6. Shut isolation valve NM-V-181 (N₂ source for test rig) leave N₂ test line in place to purge line if necessary to reduce radiation levels. Shut UDG-T-116 and UDCU-143B.

7. Remove gag from relief valve MR-7
Re adjust NMV-54 to 40 psig.

Step Complete / Time / date.

D. Estab. supply - See sketch 2

1. Isolate NM-PI-2013 and NM-PI-2003 by shutting NM-V-94 and NM-V-134
2. Connect the N₂ rig shown in sketch 2 to NM-PI-2013 and NM-PI-2003 as shown.
3. Shut the following valves:
NM-V-178 _____ NMT-V1 _____
NM-V-125 _____
4. Open the following valves:
NM-V-94 _____
NM-V-134 _____

Note: Notify Control Room prior to performing next step

5. Shut or check shut the following valves:

MU-V-13	NM-V-192 _____
NM-V-188	NM-V-108 _____
NM-V-179	NM-V-34 _____
NM-V-195	NM-V-222 _____
NM-V-194	WDC-V-143B _____

Note: This step will secure normal N₂ supply equipment downstream of NM-V-40 & NM-V-53.
An Alarm in NM PA 4180 will be announced.

6. Open NM-V6 _____

7. At the N₂ control station establish 5 psig on NM PI-2003 utilizing NM-TFCV-1

8. Open MU-V27 _____

9. Operate NMT-PCV-1 and raise pressure in MU Tank to 3-5 psig as read in Control Room.

- Do NOT EXCEED 40 psig in the N₂ Header as read on NM-PI-2003.

10. At this point determine if the addition of 3-5 psig in the makeup tr. significantly affected MU Tk. level indication. It should not be affected

E. Vent Flow Control

Note: Ensure WDC tank vent for

To R.B. & for Sampling procedure are
in progress.

1. With WDC-T-V6 shut, open Containment isolation valves

WDC-T 7 _____

BS-V-149 _____

This will relieve residual pressure and H_2 from WDC-T-1B sample procedure

Close WDC-V143 B _____

2. Establish a watch at the N_2 Regulator.
Monitor NMT-FI-1 flow indicator

3. Establish communications between the control room and the N_2 Regulator station.

4. Open WDC-T-V6 _____, SNV-195 _____ and WDC-T-V10 _____

5. Open MU-V-134 _____

6. Adjust NM-PCV-1 and NM-TV-1 to maintain 1 SCFM as read on NMT-FI-1. Do Not exceed 5 psig in MU TK. without Shift Supv. permission.

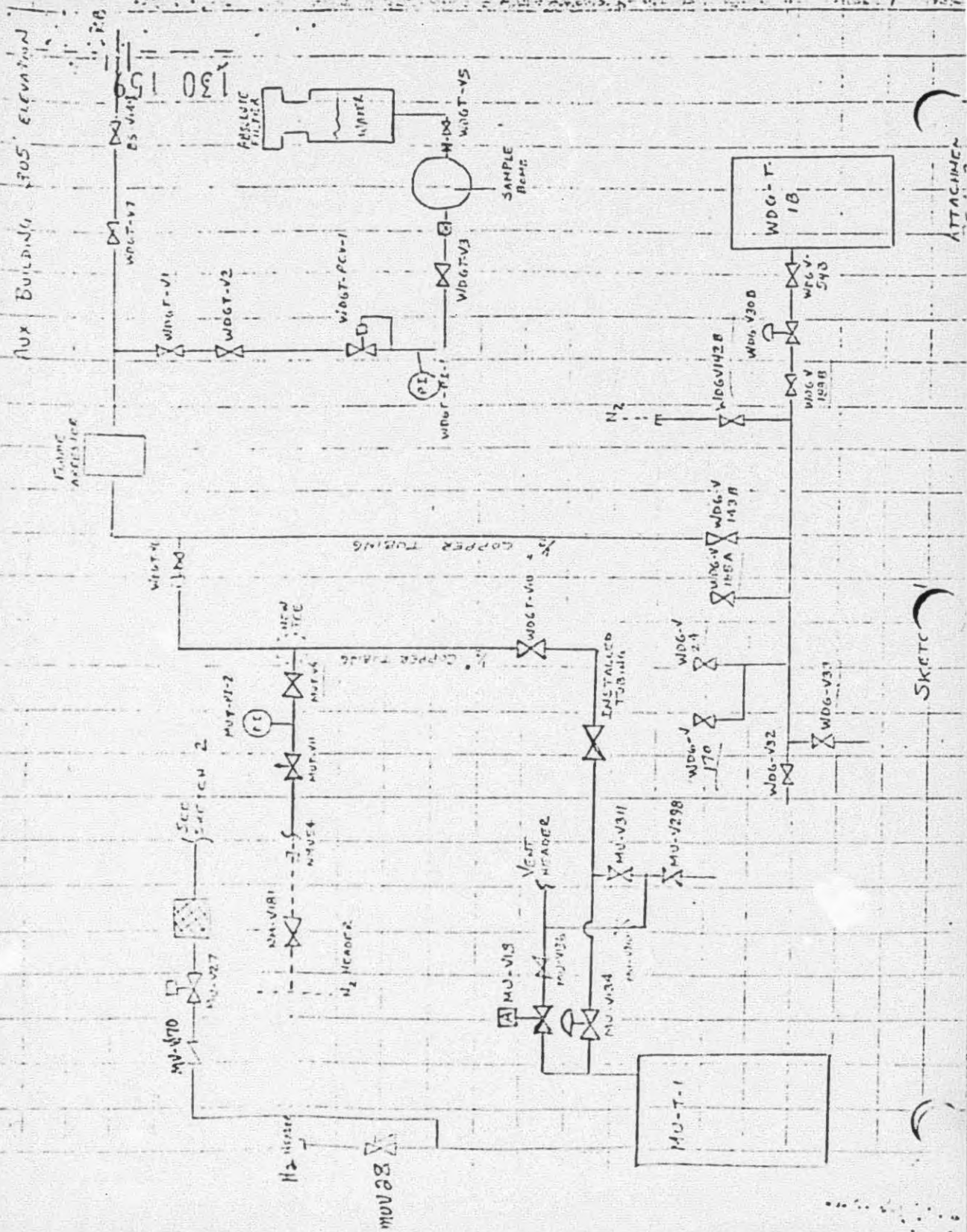
F. To Secure Vent

1. Shut MU V-27 to secure N₂ supply
2. Shut MU-V-134 to secure vent to Containment
3. If Flow is to be secured for an extended period of time, shut the containment isolation valves WDG-FV1 and BS-V-149
4. Shut NMT-T-V1

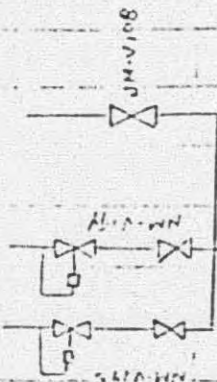
G. To Re initiate Routine Vent (After initial Op.)

1. Ensure WDG T sample & venting rig procedures are secured
2. Shut or check shut WDG-V-143B
3. Open NMT-V1. Adjust NMT-PCV-1 to obtain 3 to 5 psig as read on MU-PI 2003
4. Open or check open WDGTV-7 and BS-V-149
5. Open MU-V27 and MU-V134. Adjust NMT-PCV-1 to achieve 1 SCFM on NMT-FI-1. Do not exceed 5 psig in MU th. without shift Superv. Review

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1390 1580

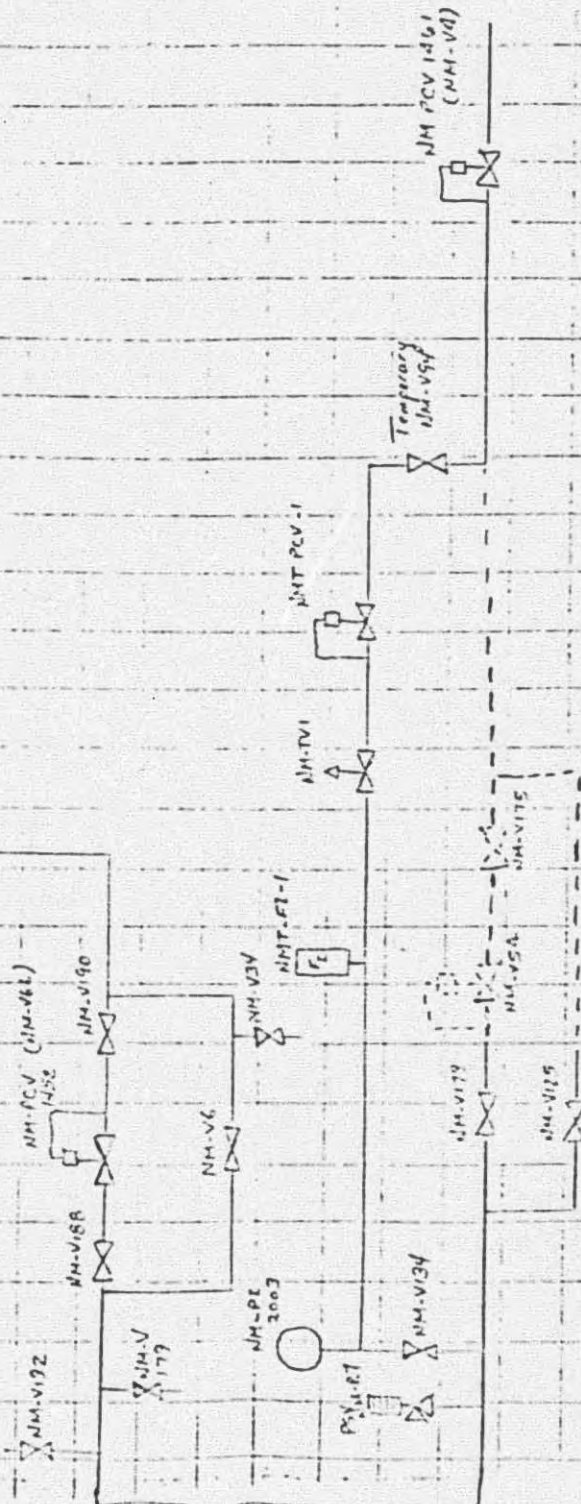


Supply to MAKEUP
Tank



NM-V222

SEE
SECTION 1
NM-V27



ATTACHMENT
REV 2

15 2

130 160

PROCEDURE COMMENT SHEET

Procedure No./Title Visiting Make-up Tank to O.D. E-37-2
 Review Group URC.
 Name/Date Wossman, Chirama 4/12/79 1100

Para.	Comment	Resolution
B.1.5 ✓	Add "for 10 ft. either side of H ₂ sampling area and any other identified work areas.	Added to original copy.
B.1.3 3.1.4 - Attachment 1	Believe BS-V149 should be BS-V147	Rig was originally attached at BS-V147 but was moved to attach to WOG Tank Vent rig which is attached at BS-V149.