

AP 1001

Three Mile Island Nuclear Station
Special Operating Procedure

SIDE 1

Figure 1001-8

SOP No. 2-34
(From SOP Log Index)

NR Info

Unit No. 2

Date 4/3/79

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

1. Title Alternate Filling Of The NaOH Tank

✓ Purpose (include purpose of SOP) TO PROVIDE GUIDANCE FOR ALTERNATE MEANS OF FILLING NaOH STORAGE TANK DH-T2 FROM PORTABLE MIX TANK

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
- B. Prerequisites
- C. Procedure

See Attached

✓ Generated by KB HARKLESS Date 4/3/79

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 [Signature]
- (b) SOP is not valid after [Signature]
(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 [Signature] 4/3/79 Date

Reviewed - List members of PORC contacted [Signature] 4/3/79 Date

AIMRA J. [Signature] 4/3/79 Date

WRC [Signature] 4/3/79 Date

Approved - Unit Superintendent [Signature] 4/3/79 Date

8. SOP is Cancelled

Shift Supervisor/Shift Foreman

Date 130-217

"EVALUATION"

AP-1001

Three Mile Island Nuclear Station

SIDE 2

Figure 1001-8

Nuclear Safety/Environmental Impact Evaluation

SOP No. _____

1. Title _____

2. Nuclear Safety Evaluation

Does this SOP:

- * (a) increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety? yes no
- * (b) create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report? yes no
- * (c) reduce the margin of safety as defined in the basis for any technical specification? yes no

Details of Evaluation (Explain why answers to above questions are "no". Attach additional pages if required.)

Evaluation By _____ Date _____

3. Environmental Impact Evaluation

Does this SOP:

- (a) possibly involve a significant environmental impact? yes no
- * (b) have a significant adverse effect on the environment? yes no
- * (c) involve a significant environmental matter or question not previously reviewed and evaluated by the N.R.C. yes no

Details of Evaluation

Evaluation By _____ Date _____

* NOTE: If these questions are "yes", the change must receive N.R.C. approval.

4. Review (PORC review of evaluation is required only when requested by the Station Superintendent/Unit Superintendent. If this review is made, the PORC must consist of two off-site members.)

1. _____

2. _____

Off-Site Members

PORC Chairman Signature

Date

5. Approval

Station Superintendent/Unit Superintendent

130 218

Date

LIMITS AND PRECAUTIONS

- PERSONNEL:
- A. INSURE PROTECTIVE CLOTHING IS USED WHILE HANDLING CAUSTIC MATERIALS
 - B. AVOID SPILLS

- EQUIPMENT
- A. MONITOR LEVEL OF NaOH STORAGE TANK WHILE FILLING FROM TRUCK.
 - B. AVOID SPILLS.
 - C. INSURE TRUCK IS CLEAN BEFORE MIXING NaOH SOLUTION
 - D. INSURE VENT VALVE DH-V138 IS OPEN TO PREVENT PRESSURIZATION OF TANK.

PREREQUISITES

INSURE SPOOL PIECE IS CONNECTING TRUCK TO NaOH STORAGE TANK IS ~~SECURELY~~ IN PLACE.
(FLANGE CONNECTION UPSTREAM OF DH-V143)

C. PROCEDURE

NOTE: APPROXIMATELY 5000 gal OF 20 WT% NaOH SOLUTION IS TO BE ADDED TO THE NaOH STORAGE TANK DH-T2. THIS REQUIRES 8000 # NaOH AND DEMIN. WATER.

1. MIX 8000 # NaOH WITH DEMIN. WATER TO MAKE 4000 gal OF SOLUTION. THIS SHOULD GIVE A 25 WT% SOLUTION.
2. VERIFY ALL CONNECTION ARE COMPLETE
3. OPEN DH-V143 AND CHECK OPEN DH V138
4. PUMP THE 4000 gal OF SOLUTION INTO THE NaOH STORAGE TANK.
5. RINSE THE TRUCK TANKS WITH 1000 gal DEMIN. WATER AND PUMP THIS WATER INTO THE STORAGE TANK. THIS DILUTES THE NaOH TO 20 WT%.
6. CLOSE DH-V143 REMOVE CONNECTIONS AND ~~REPLACE BLANK FLANGE.~~ CLOSE DH V138
7. COMPLETE PROCEDURE FOR NaOH TANK RECIRC. 130 220

~~SECRET~~
4.4 Procedure for NaOH Tank Recirc.

4.4.1 Attach suction hose to flange at DH-V143 and to suction of pump.

CAUTION: Insure DH-V143 is closed before attaching hose.

4.4.2 Attach discharge hose to flange at DH-V141 and to discharge of pump.

CAUTION: Insure DH-V141 is closed before attaching hose.

4.4.3 OPEN DH-V141.

OPEN DH-V143.

4.4.4 Plug in pump to 480V 3Ø receptacle.

4.4.5 Start NaOH Recirc Pump using skid mounted starter.
Throttle DH-V141 to prevent cavitation.

4.4.6 Stop NaOH Recirc Pump after recirc is complete.

4.4.7 CLOSE DH-V141.

CLOSE DH-V143.

5.0

4.4.8 Unhook discharge at DH-V141 line and run to acceptable drain.

4.4.9 Unhook suction at DH-V143 hose and attach flush water and flush.

4.4.10 Bump pump motor to aid flush.

4.4.11 Drain completely.

4.4.12 Place covers on hose connections at DH-V141 and DH-V143.

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