AP 1001
Figure 1001-8

Three Mile Island Nuclear Station
Special Operating Procedure

NRC

SIDE 1

SOP No. 2-53
(From SOP Log Index)

Unit No. 2

Date 4/6/79

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

1. Title: Reduction of Iodine Levels In Aux Bldg From
2. Purpose (include purpose of SOP): Standing water using NaOH & Sodium Thiosulfate mixture

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

   Attached

4. Generated by Yoshito Nagai Date 4/6/79

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)

   N/A

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 ☐

   N/A

   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] 4-6-79
Date

WRC [signature] 4/6/79
Reviewed – List members of PORC contacted R.F. Warren 4/6/79
Date

[signature] 4-6-79
B&W [signature]
N C Rea[signature] 4/6/79
Date

[signature] 4/6/79
JD Porter 4/6/79
[signature] 4/6/79
Date

Approved - Unit Superintendent [signature] 4/6/79
Date

8. SOP is Cancelled

131 074

______ Shift Supervisor/Shift Foreman ______ Date

Attachment to SOP No 2-53

A. Limitations and Precautions

1. Nuclear Safety ..... None

2. Environmental Safety ..... None

3. Personnel Safety ..... Per THIS Rad Prot Practice
RWP required
Keep bare skin from
touching sodium Hydraide
and Sodium thiosulfate
* (~~Plant~~ Normal Plant
Precautions when mixing
NaOH and $Na_2S_2O_3$)

4. Equipment Protection ..... None

B. Prerequisites

Equipment and Chemicals needed

1. 100 gallon-tank with pump on dolly located at Unit 2 Aux Bldg shield door
2. 40 gallons of 20% NaOH
3. 20 gallons of 30% $Na_2S_2O_3$
4. → hoses approximately 100 ft in length (Black natural rubber)
5. Check operation of pumps for the 100 gallon-tank on dolly.
6. Adequate power source available

131 075

C. Procedure

Step 1 Add and mix 40 gallons of 20% NaOH and 20 gallons of 30% $Na_2S_2O_3$ into the 100 gallon tank at outside Unit 2 Aux Bldg shield door.

Step 2. Run a black rubber hose through the Aux Bldg shield door to a floor drain on elevation 305'-0 at column line AP by A64 just north of stairwell.

Step 3 Remove drain cover and securely fasten the hose to the floor drain

Step 4 Connect power to pump-motor.

Step 5 Valve line up:

1. Close Drain valve
2. Close Sample valve
3. Open pump discharge valve

Step 6 Start pump motor and pump out the mixture in the tank

131 076

Step 7 Secure the pump

Step 8 Disconnect the hose and leave the hose inside the Aux Bldg shield door

Step 9 Close the Aux Bldg shield door.