

AP 1001

Three Mile Island Nuclear Station

SIDE 1

Figure 1001-8

Special Operating Procedure

NRC

SOP No. 2-109  
(From SOP Log Index)

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

Unit No. 1E

Date 4/20/79

1. Title EVERLINE STACK MONITOR DATA COLLECTION

2. Purpose (include title of SOP)  
PROVIDE GUIDANCE TO <sup>AID</sup> ALLOW OPERATIONS TO COLLECT DATA FROM EVERLINE STACK MONITOR.

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

} PER ATTACHED

B. Prerequisites

C. Procedure

4. Generated by James R. Paulke Date 4/20/79

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 MMH

(b) SOP is not valid after MMH   
(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 Station Superintendent/Unit Superintendent.

7. Review and Approval

NRC file copy Approved - Shift Supervisor JR Paulke Date 4/20/79

BW Reviewed - List members of PORC contacted JR Paulke Date 4/20/79

ALACA Approved - Station Superintendent/Unit Superintendent JR Paulke Date 4/20/79

8. SOP is Cancelled

Shift Supervisor/Shift Foreman

Date

133 279

A. Limits & Precautions:

1. Nuclear Safety - None
2. Environmental Safety - None
3. Personnel Safety - Comply with MEC Safety Manual <sup>At 100%</sup>
4. Equipment Safety - After data has been taken, ensure printer/keyboard drawer is closed to prevent dust accumulation on the printer/keyboard.

B. Prerequisites

1. SOP will be run by OPB at time intervals as directed by Shift foreman/supervisor.
2. SOP will be run by HP immediately prior to filter changes.
3. Prior to going out to Eberline units (located on roof of CBA east - 331'6" elevation), determine flow rate in stack in SCFM. This value will be needed to perform step C.5 of procedure.
4. During normal unit operation (except period of time when filters are being changed) the green light above each digital readout should be lit. If not, notify Unit 2 ITC Shop.

NOTE: Eberline Unit will print out automatically every 4 hours (i.e. 0000; 0400; 0800; etc.), if the SOP is being executed during these times, the computer will interrupt to print out <sup>the</sup> scheduled 4 hour data.

## C. PROCEDURE

C.1 The symbol X is used to designate the data channel of interest. The following table shows the relationship ~~is~~ between data channel and the value of X:

<u>Data Channel</u>	<u>Value of X</u>
Particulate Beta	1
Iodine	3
Noble Gases	5

Enter the following instructions using the keyboard pushbuttons:

```
← HIST MIN  
X  
ENTER
```

The system will print the Julian date, the time, the channel, its status, and 23 10-minute average values. For channels 1 and 3 the value printed is the filter activity in  $\mu\text{Ci}$ . For channel 5, the concentration is printed. The last value printed is for the most recent 10-minute period.

C.2 Set the History Format Switch to REDISPLAY

C.3 Enter the following instructions using the keyboard pushbuttons:

```
PRINT  
• F + LE (real button)  
ENTER
```

133 281

The system will print 23 10-minute average concentrations ( $\mu\text{Ci}/\text{cc}$ ). (For channel 5 (noble gases) this is the same data printed in step 1.)

C.4 Set the History Format Switch to RELEASE RATE

C.5 Enter the following instructions using the keyboard pushbuttons:

PRINT

• FILE (red button)

ENTER

The system will ~~ask for the stack~~ flow rate in ~~cc~~  $\frac{cc}{min}$ . Multiply the total stack flow rate in  $cfm$  by 25320 to obtain this value.

C.6 Enter the stack flow rate ( $cfm$ ) ~~in~~ ~~the following format~~ ~~using~~ the keyboard pushbuttons:

+ . . . + . . .

ENTER

FOR EXAMPLE:

A stack flow rate of 80,000  $cfm$  converts to  $2.44 \times 10^3 \frac{cc}{min}$  and is entered as " + 2.44 + 09" by keying in ~~the~~ the symbols and digits in the appropriate sequence.  $\uparrow$

CHECK the value entered on the print out.

~~If it is incorrect, the computed release rate will also be wrong, and steps C.5 + C.6 must be repeated.~~  $\uparrow$  If it is incorrect, the computed release rate will also be wrong, and steps C.5 + C.6 must be repeated.

The system will print 23 10-minute average release rates ( $\mu Ci/min$ )

C.7 Repeat steps C.1 - C.6 for other data channels of interest. (Steps C.2 and C.3 can be omitted for channel 5 since the concentration is printed in step C.1 for that channel.)

C.8. Advance chart paper and remove top copy, if desired. Leave bottom copy on the taking reel.

C.9. Close drawer after use to prevent dust accumulation on printer and keyboard.

C.10. If OPS RUNS THIS SOP, TURN DATA OVER TO DUTY <sup>SHIFT SUPERVISOR</sup> HP ~~FORWARD~~  
If HP RUNS THIS SOP, TURN DATA OVER TO DUTY HP FORWARD