

EOP: AP-SW.1	TITLE: SERVICE WATER LEAK	REV: 7 PAGE 1 of 7
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ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER 23

TECHNICAL REVIEW

PORC REVIEW DATE 2-7-90

Joseph A. Widay  
PLANT SUPERINTENDENT

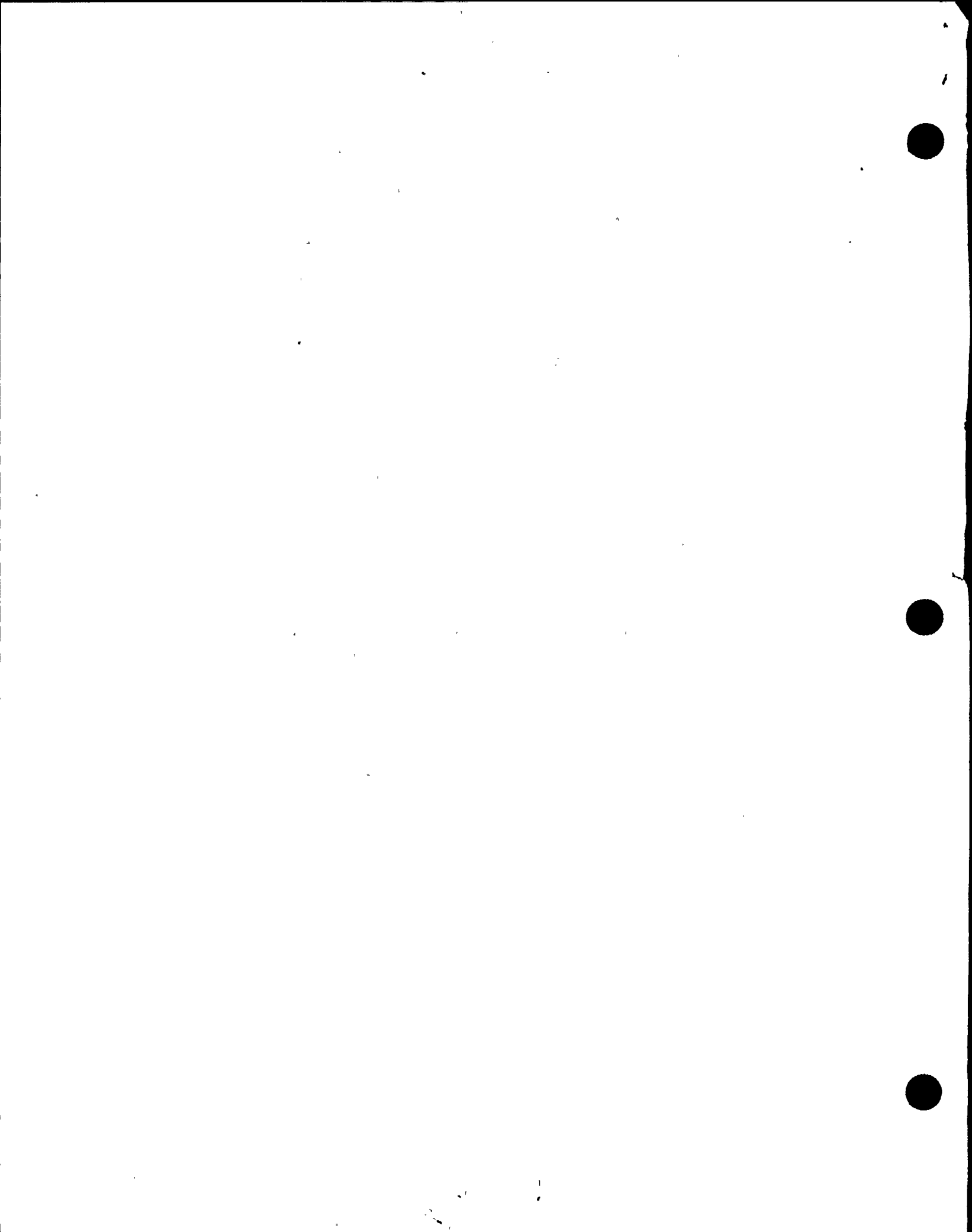
2-23-90  
EFFECTIVE DATE

QA  NON-QA \_\_\_\_\_ CATEGORY 1.0  
REVIEWED BY: \_\_\_\_\_

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PDR ADCK 05000244  
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GINNA STATION	
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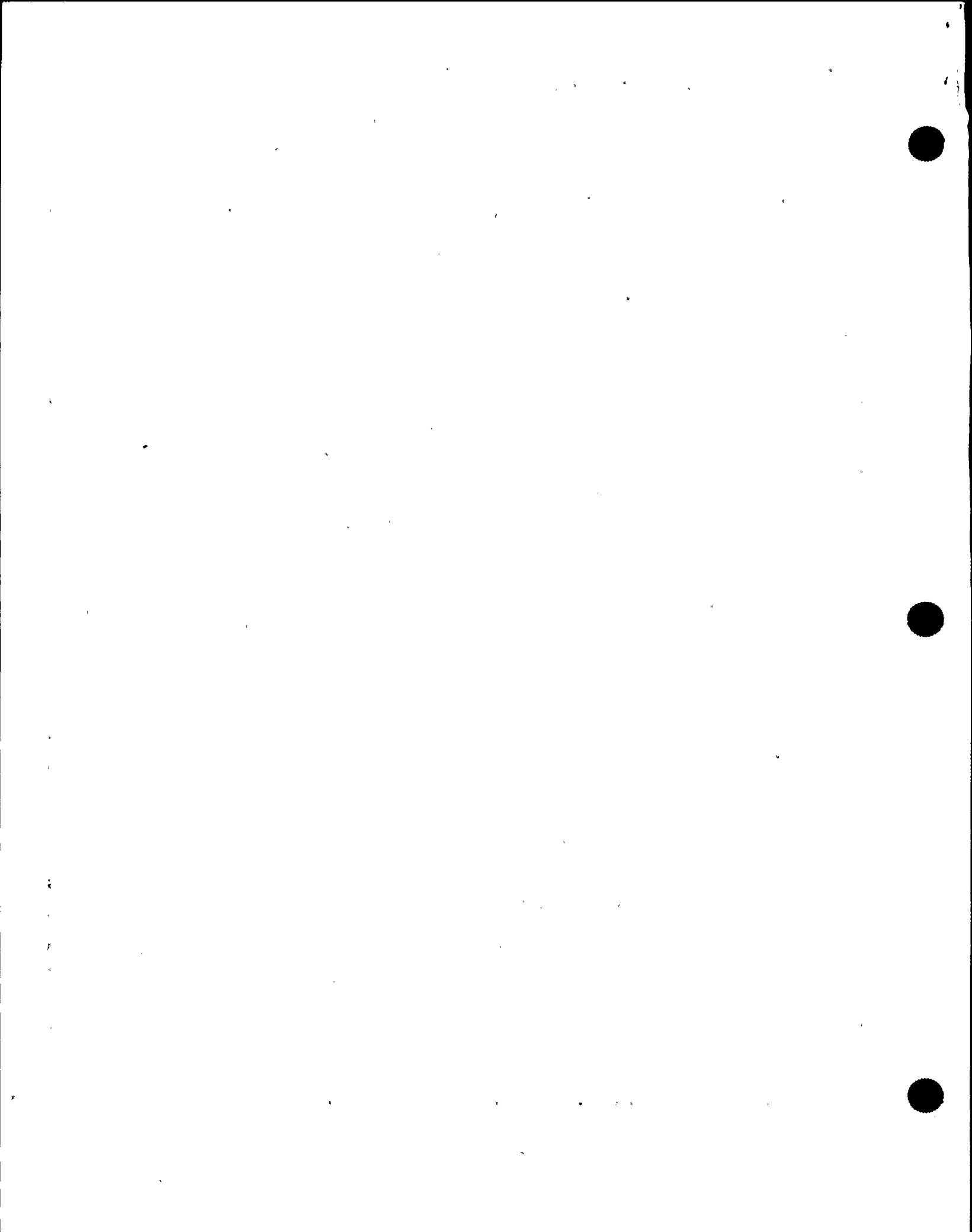
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A. PURPOSE - This procedure provides the necessary instructions to respond to a station service water leak.

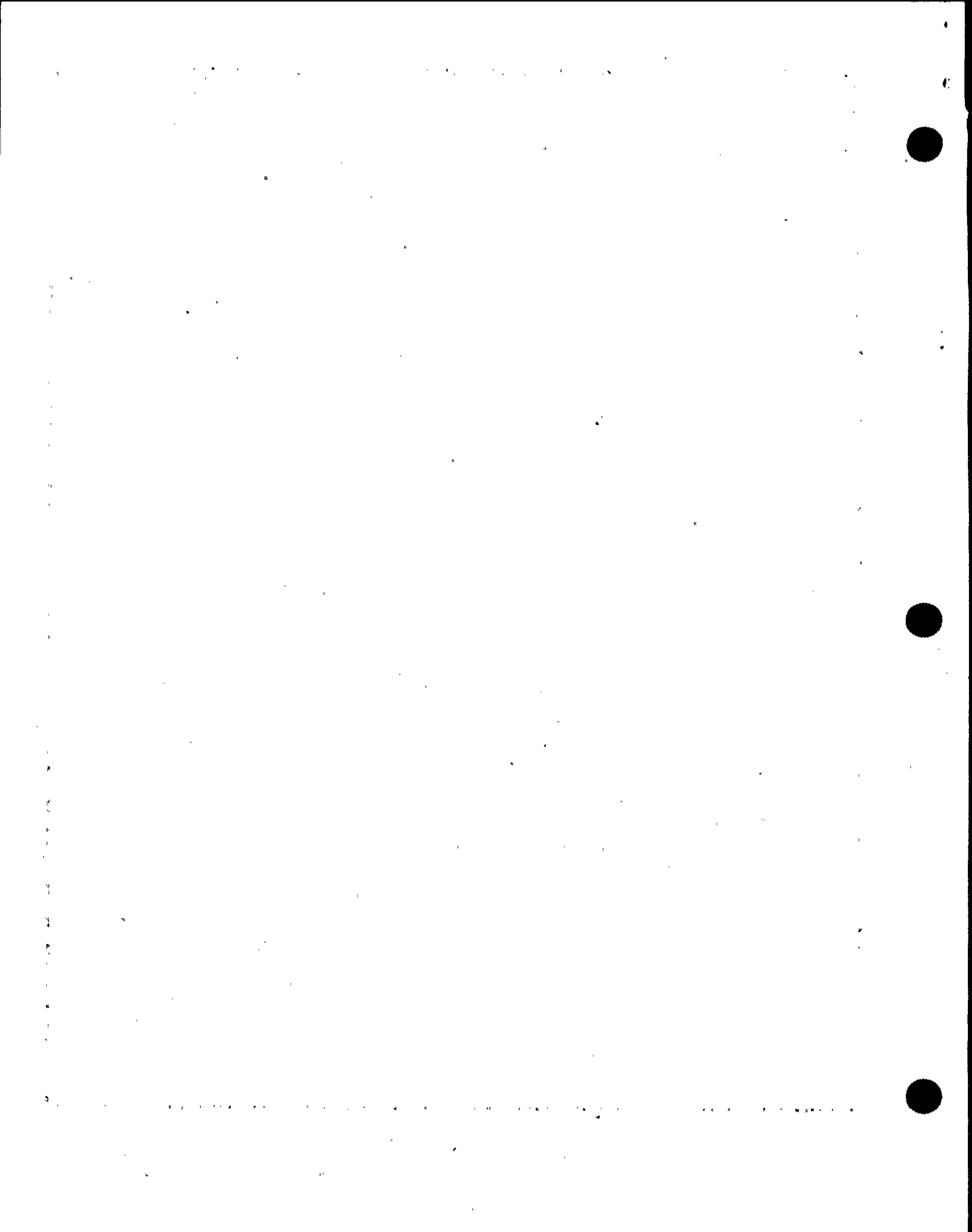
B. ENTRY CONDITIONS/SYMPTOMS

1. SYMPTOMS - The symptoms of SERVICE WATER LEAK are;

- a. Service water header pressure low alarms on computer, or
- b. Annunciator H-6, CCW SERVICE WATER LO FLOW 1000 GPM, alarms, or
- c. Annunciator E-31, CONTAINMENT RECIRC FAN CONDENSATE HI-HI LEVEL alarm, exhibits an unexplained increase in frequency, or
- d. Sump pump activity increases in containment, the aux bldg, or intermediate bldg, or
- e. Unexplained increase in the waste hold-up tank, or
- f. Visual observation of an SW leak.

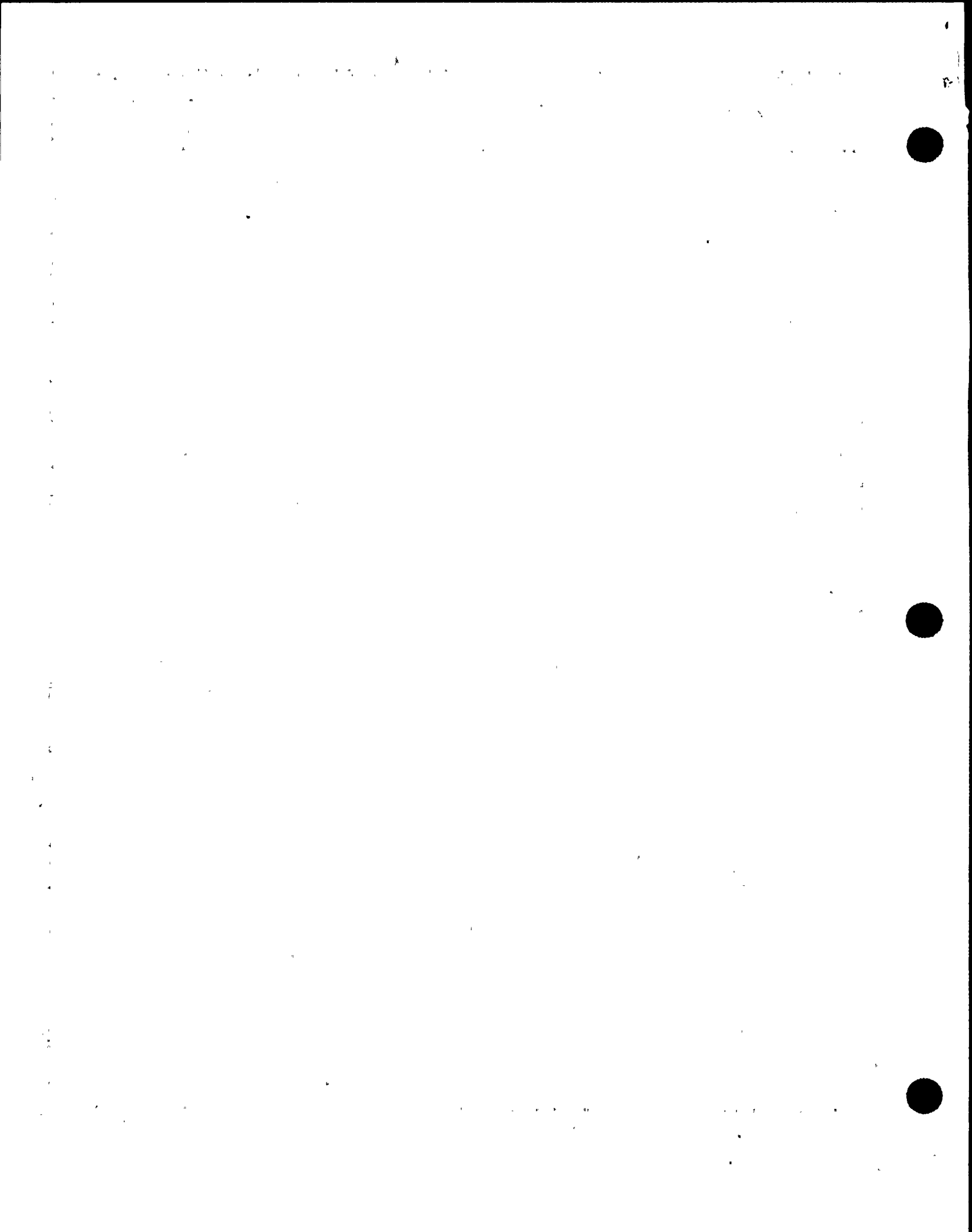


STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
<p>*****  <u>CAUTION</u>            IF EITHER D/G STARTS, BUT WILL NOT ACCEPT ELECTRICAL LOAD, AND COOLING WATER NOT AVAILABLE, STOP THE AFFECTED D/G TO PREVENT OVERHEATING.            *****</p>		
<p><u>NOTE:</u>   o Steps 1 through 3 are IMMEDIATE ACTION steps.                      o See Attachment A for a list of the major non-safeguards loads supplied by each service water header.</p>		
1	Verify 480V Busses 17 and 18 - ENERGIZED	Verify D/Gs running <u>OR</u> start D/Gs and manually load busses 17 and 18 onto the D/Gs if necessary.
2	Verify 1 SW Pump RUNNING In Each Loop: o Loop A, 1A or 1B SWP pump - RUNNING o Loop B, 1C or 1D SWP pump - RUNNING	<u>IF</u> an SW pump has tripped, <u>THEN</u> start the standby pump for that loop.
3	Check SW Header Pressure For Each Loop: o A loop SW header pressure - GREATER THAN 40 PSIG AND STABLE OR INCREASING o B loop SW header pressure - GREATER THAN 40 PSIG AND STABLE OR INCREASING	<u>IF</u> pressure can <u>NOT</u> be restored in both loops, <u>THEN</u> trip the reactor and go to E-0, REACTOR TRIP or SAFETY INJECTION.



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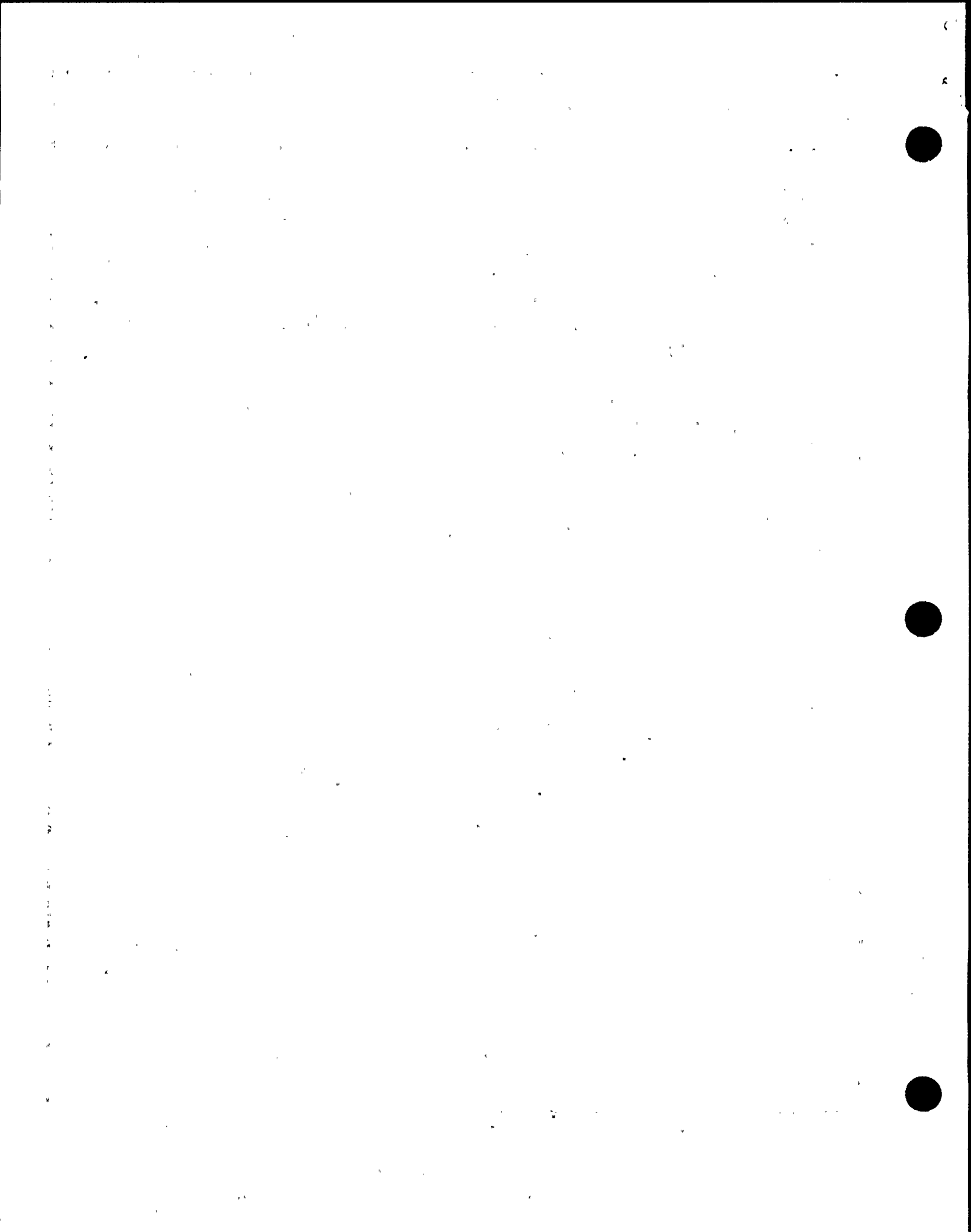
STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
<u>NOTE:</u>	If SW is lost to any safeguards equipment, the affected component should be declared inoperable and appropriate actions taken as required by Tech Specs, Section 3.	
4	Check CNMT For SW Leakage: <ul style="list-style-type: none"> <li>o CNMT sump A level - INCREASING</li> <li>o CNMT sump A pump start frequency - INCREASING</li> </ul>	<u>IF</u> the SW leak is <u>NOT</u> in the CNMT, <u>THEN</u> go to Step 8.
<u>NOTE:</u>	<ul style="list-style-type: none"> <li>o An A-25.1, GINNA STATION EVENT REPORT, should be submitted for a SW leak in containment.</li> <li>o Refer to 0-9.3, NRC IMMEDIATE NOTIFICATION, for reporting requirements.</li> <li>o Sump at 10 feet indicated on the control board indicators is approximately 6 feet 6 inches below the bottom of the reactor vessel.</li> </ul>	
5	Check If The SW Leak Is Within The Capacity Of 1 CNMT Sump Pump (50 GPM): <ul style="list-style-type: none"> <li>o Maximum of 1 CNMT sump A pump running AND sump A level - LESS THAN 10 FEET AND STABLE OR DECREASING</li> </ul>	<u>IF</u> leakage exceeds the capacity of 1 CNMT sump pump, <u>THEN</u> plant shutdown should be considered.





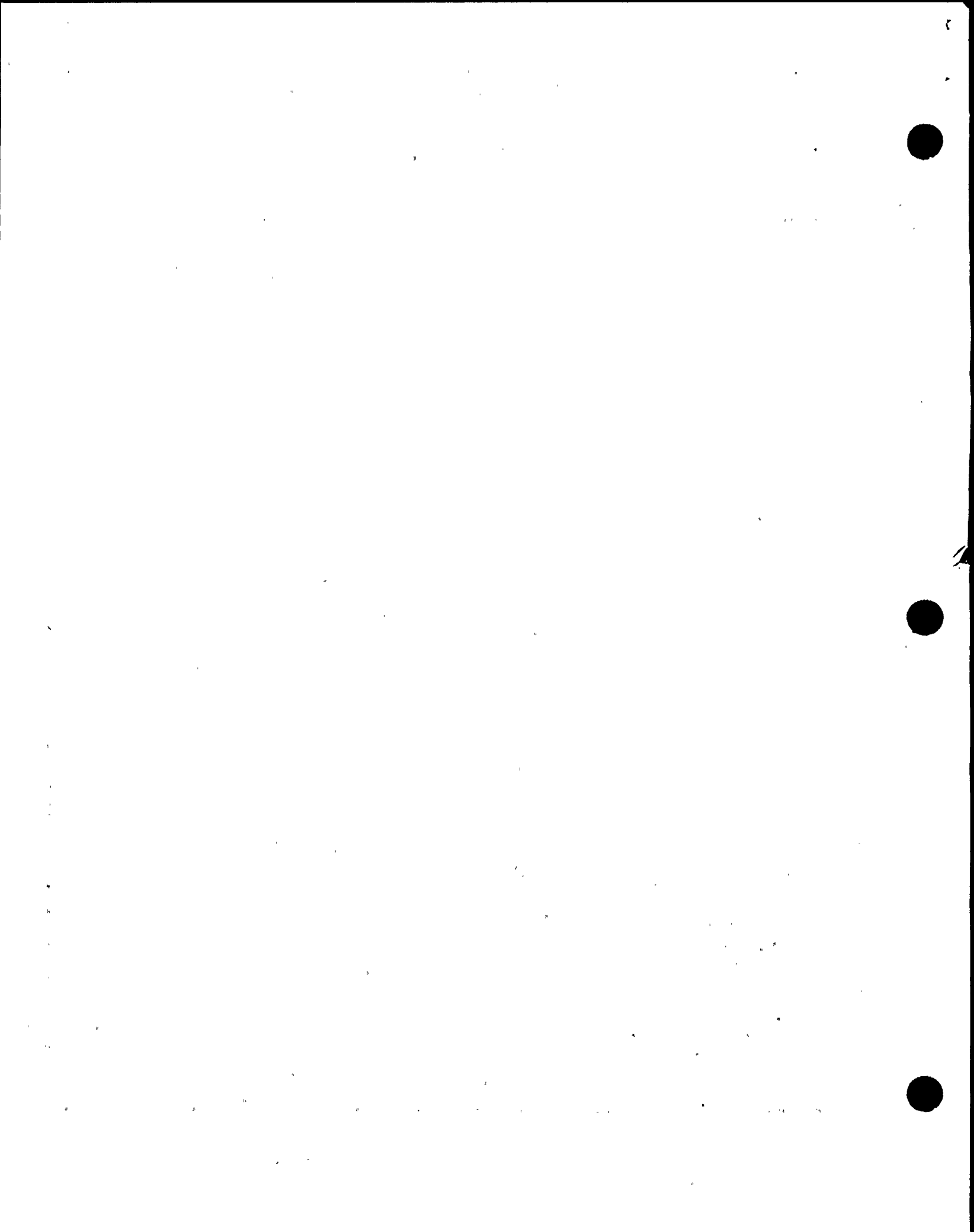
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
	<p><u>NOTE:</u> CNMT recirc fan condensate collector level indicators may be helpful in identifying a leaking fan cooler.</p>	
6	<p>Check, Prior to A CNMT Entry, If Source Of SW Leak Is A Leaking CNMT Recirc Fan Cooler OR A Reactor Compartment Cooler:</p>	
	<p>a. CNMT recirc fan coolers AND reactor compartment coolers isolated one at a time (Refer to Attachment B for isolation) - LEAKAGE DETECTED</p>	<p>a. <u>IF</u> leak can <u>NOT</u> be located without a CNMT entry, <u>THEN</u> make a CNMT entry. Refer to A-3, CONTAINMENT VESSEL ACCESS REQUIREMENTS.</p>
7	<p>Complete - ISOLATION OF LEAKAGE SOURCE AND GO TO STEP 16</p>	
8	<p>Check Aux Bldg And Inter Bldg Sump Pump To Determine The General Location Of A Leak:</p> <p>o Aux Bldg OR Inter Bldg sump pump run frequency - INCREASED</p>	<p><u>IF</u> AUX BLDG and Intermediate Bldg. sump pumps run frequency has <u>NOT</u> increased, <u>THEN</u> have personnel check for leakage in the Turbine Bldg.</p>
9	<p>Establish - THE SPECIFIC LOCATION OF THE LEAK</p>	
10	<p>Complete An Evaluation - ON THE CONSEQUENCES OF ISOLATING THE LEAKING SECTION</p>	



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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
<p><u>NOTE:</u> If SW is lost to either D/G, refer to ER-DG.2, ALTERNATE COOLING FOR EMERGENCY D/Gs, if cooling is required.</p>		
11 Establish If Plant Operation May Continue:	o Plant operation - MAY CONTINUE	<p><u>IF</u> plant shutdown is required, <u>THEN</u> refer to O-2.1, NORMAL SHUTDOWN TO HOT SHUTDOWN.</p>
12 Establish Isolation Of The SW Leak At The Source:	a. SW leak - ISOLATED AT THE SOURCE	<p>a. <u>IF</u> the leak can <u>NOT</u> be isolated within either loop, <u>THEN</u> split the A and B loops as follows:</p> <ol style="list-style-type: none"> <li>1) Close V-4669 <u>OR</u> V-4760 in B D/G room.</li> <li>2) Close V-4611 <u>OR</u> V-4612 in screenhouse.</li> <li>3) Close V-4625 <u>OR</u> V-4626 in Inter Bldg clean side.</li> <li>4) Close V-4639 <u>OR</u> V-4756 in Inter Bldg clean side.</li> <li>5) Go to Step 13.</li> </ol>
	b. Go to Step 16	
13 Establish Which Loop Has The Leak:	<p>a. Check leak location on SW flow print - TO DETERMINE WHICH LOOP SHOULD BE AFFECTED</p> <p>b. Verify header pressure in affected loop - LESS THAN INTACT LOOP HEADER PRESSURE</p>	



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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

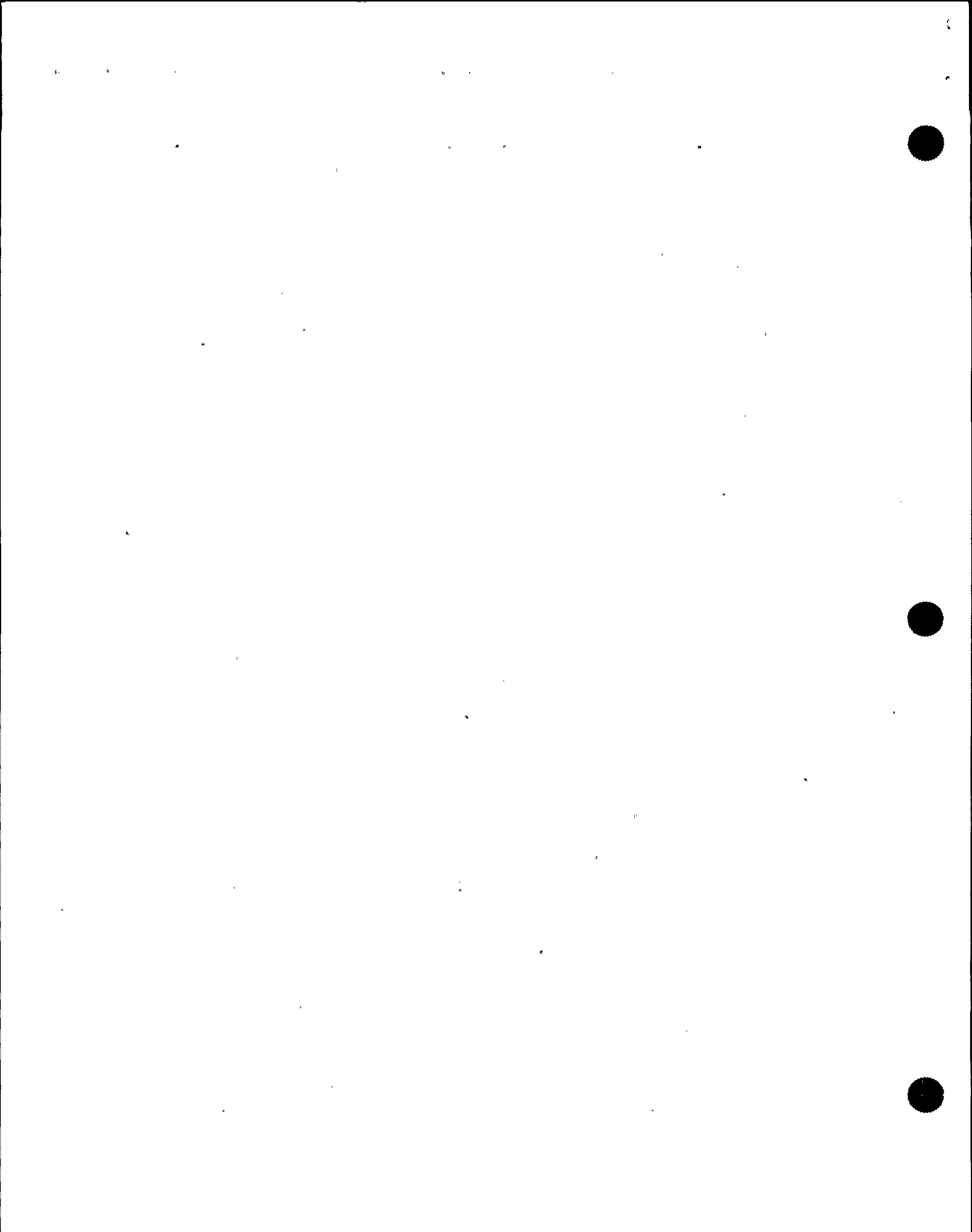
14 SW Pumps In Affected Loop -  
STOPPED

Stop SW pumps in affected loop.

15 Complete - ISOLATION OF THE  
LEAK

16 Complete - NOTIFICATION TO  
MAINTENANCE AND HIGHER  
SUPERVISION

-END-



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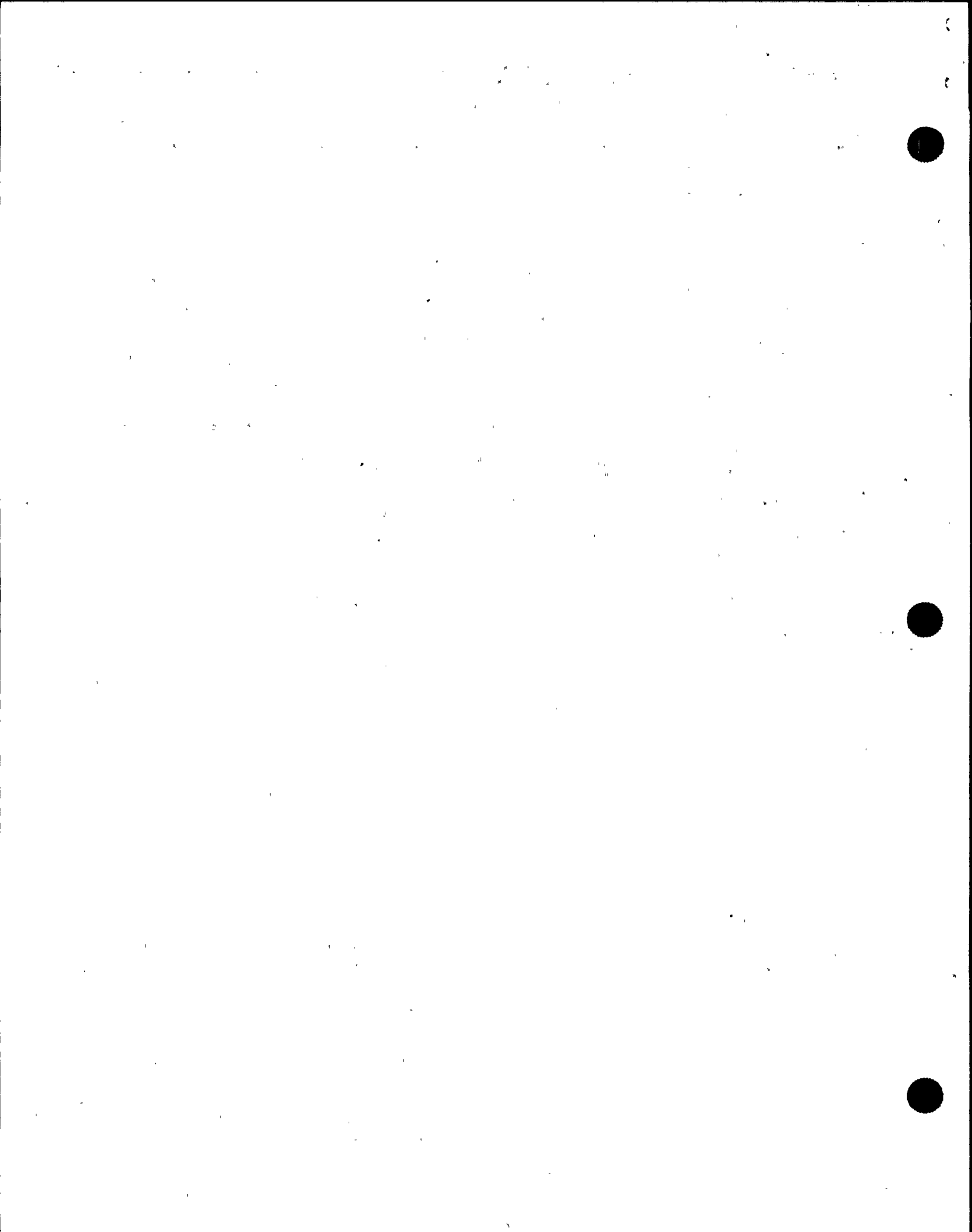
ATTACHMENT A

A SW LOOP NON-SAFETY RELATED LOADS:

- o 1A and 1C instrument air compressors.
- o 1A main feed pump.
- o Exciter cooler.
- o Bus duct coolers (both)
- o Seal oil unit airside and H2 side coolers.
- o B turbine oil cooler.
- o All 3 condensate pumps.
- o Secondary sample coolers.
- o Battery room air conditioners.
- o Relay room air conditioners.
- o Traveling screens.
- o Circulating water pumps.
- o Administrative computer room HVAC.
- o House heating boiler sample cooler.
- o Spent fuel pit Hx.

B SW LOOP NON-SAFETY RELATED LOADS:

- o 1B main feed pump.
- o Both heater drain pumps.
- o Both EH oil coolers.
- o A turbine oil cooler.
- o 1B instrument air compressor.
- o Service air compressor.
- o Vacuum priming pumps.
- o 1A and 1B HVAC water chillers.
- o Laundry room cooler.
- o New spent fuel pit Hx.





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ATTACHMENT B

SERVICE WATER LOADS IN CONTAINMENT AND ASSOCIATED ISOLATION VALVES:

NOTE: A locked valve key will be needed as these are locked valves.

Intermediate Bldg. (clean side):

- o A CNMT recirc fan cooler  
SW inlet V-4627  
SW outlet V-4629
- o B CNMT recirc fan cooler  
SW inlet V-4628  
SW outlet V-4630
- o C CNMT recirc fan cooler  
SW inlet V-4641  
SW outlet V-4643
- o D CNMT recirc fan cooler  
SW inlet V-4642  
SW outlet V-4644

Intermediate Bldg. (hot side - sample hood):

- o A Rx compartment cooler  
SW inlet V-4757  
SW outlet B-4758
- o B RX compartment cooler  
SW inlet V-4635  
SW outlet V-4636

