Respond to Panel 107 Alarms at 271-AP

**Panel ANN-107 Alarm Index**

<table>
<thead>
<tr>
<th>Alarm</th>
<th>Description</th>
<th>Color</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supernate Pmp WT-P-007 Shutdown (WT-SDA-307)</td>
<td>White</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Annulus Leak Detected Tank 107 (WSTA-LDA-127)</td>
<td>Yellow</td>
<td>3</td>
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</table>

Figure 1: 241-AP-271 Instrument Building Alarm Panel ANN-107

**RECORDS**

No records are generated during the performance of this procedure.
Respond to Panel 107 Alarms at 271-AP

Facility: 241-AP-271 INSTRUMENT BUILDING

Panel: ANN-107  Alarm #:1

Source: AP07A-WT-P-007  Setpoint: N/A

Alarm Class: Equipment Status

Alarm Description: Supernate pump WT-P-007 shut down

NOTE - Alarm Response Procedures are not designed for, nor intended to be applied to, "expected" alarms generated by approved work activities or procedures.

- This alarm is expected when SN PUMP AP07A-WT-P-007 is shut down with the motor control center breaker shut.

Immediate Actions:

[1] CHECK that PUMP AP07A-WT-P-007 (pump P-107-1) status is OFF (STOP pushbutton not illuminated, START pushbutton illuminated).


Possible Causes:

1. The pump has automatically tripped from one of the following:
   - Motor overload
   - HI or LOW motor current
   - Blown motor control center breaker control circuit fuse.

2. Mechanical failure of pump.

3. Instrument malfunction.

References:

Documents: None
Facility: 241-AP-271 Instrument Building

Panel: ANN-107  
Alarm #: 9

Source: AP107-WSTA-LDT-151
AP107-WSTA-LDT-152
AP107-WSTA-LDT-153

Setpoint: 0.25 inches ± 0.02 inches above the annulus bottom

Alarm Class: Environmental

Alarm Description: Liquid detected by 241-AP-107 annulus leak detectors

NOTE - Alarm Response Procedures are not designed for, nor intended to be applied to, "expected" alarms generated by approved work activities or procedures.

Immediate Actions:

[1] **ACKNOWLEDGE** alarm.

[2] **IF** a transfer is in progress into or out of 241-AP-107, **REQUEST** MBD Operator shut down transfer.

[3] **CHECK** local displays of Annulus AP107-WSTA-LDT-151, AP107-WSTA-LDT-152, and AP107-WSTA-LDT-153, for the following:

- ENRAFs are not in alarm (HA indication will be in display for alarm condition)
- Displacers are less than or equal to 0.25 inches from the bottom of the annulus tank.


[5] **NOTIFY** Shift Manager of alarm, actions and findings.

[5.1] **IF** annulus leak detectors show increased level in the annulus.

[5.2] Shift Manager **EVALUATE** TF-AOP-005 entry criteria.

[5.3] Shift Manager **NOTIFY** maintenance to perform leak detection verification per 6-LDD-485.

Supplemental Actions:

[6] Shift Manager **NOTIFY** Environmental On-Call per TF-REC-001.

(Continued On Next Page)
Facility: 241-AP-271 Instrument Building

Panel: ANN-107  Alarm #: 9

Source: AP107-WSTA-LDT-151  Setpoint: 0.25 inches ± 0.02 inches above the annulus bottom
AP107-WSTA-LDT-152
AP107-WSTA-LDT-153

Possible Causes:
1. Waste leaking from primary tank to annulus.
2. Condensate, rainwater, snowmelt, or other water has entered the annulus from outside.
3. Instrument malfunction.
4. ENRAF performed a reset due to loss of power.
5. Time delay relay fails.

References:
Drawings: H-14-020503, H-2-90476 Sheet 3
Documents: RPP-16922, Environmental Specification Requirements
OSD-T-151-00031, Operating Specifications for Tank Farm Leak Detection and Single Shell Tank Intrusion Detection, Table 3-1
HNF-SD-WM-TSR-006, Tank Farms Technical Safety Requirements
TF-AOP-005, Response to Unexpected Tank Temperature or Flammable Gas Increase or Level Change
6-LDD-485, ENRAF Series 854 Annulus Leak Detection Gauges Calibration and Maintenance
Respond to Panel 107 Alarms at 271-AP

Figure 1: 241-AP-271 Instrument Building Alarm Panel ANN-107

<table>
<thead>
<tr>
<th>SUPERNATE PMP</th>
<th>WT-P-007</th>
<th>SHUTDOWN (WT-SDA-307)</th>
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<th>W</th>
<th>2</th>
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<td>ANNULUS LEAK DETECTED</td>
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<td>TANK 107 (WSTA-LDA-127)</td>
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