Respond to AP Farm Graphic #290 Alarms at the 242-A Evaporator

Tank Farm Alarm Response Procedure

USQ # EV-17-1712-S, Rev. 0

CHANGE HISTORY (LAST 5 REV-MODS)

<table>
<thead>
<tr>
<th>Rev-Mod</th>
<th>Release Date</th>
<th>Justification</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-2</td>
<td>11/21/2017</td>
<td>Operations request</td>
<td>Modified graphic numbers</td>
</tr>
<tr>
<td>K-1</td>
<td>01/12/2017</td>
<td>AP Demo Project</td>
<td>Struck out Page 2 graphic 290 Yellow YS-AP-K1 alarm page, and note on page Red QS-AP-1 alarm page.</td>
</tr>
<tr>
<td>K-0</td>
<td>12/08/2016</td>
<td>Periodic Review</td>
<td>No Changes</td>
</tr>
<tr>
<td>J-1</td>
<td>09/15/2016</td>
<td>New AP Exhauster installed.</td>
<td>YS-AP-K1 alarm designated as inactive since associated with AP Farm Primary exhauster being replaced by new exhausters. General Farm alarm QS-AP-1 added note alarm will be activated when old exhauster is shut down and will remain active until disconnected during decommissioning operations.</td>
</tr>
<tr>
<td>J-0</td>
<td>12/17/2014</td>
<td>Periodic review</td>
<td>No identified changes. Only updated footer and cover page.</td>
</tr>
</tbody>
</table>

242-A EVAPORATOR ALARM INDEX

GRAPHIC #290

<table>
<thead>
<tr>
<th>Alarm #</th>
<th>Description</th>
<th>Color</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>QS-AP-1</td>
<td>AP FARM GENERAL ALARM</td>
<td>RED</td>
<td>2</td>
</tr>
<tr>
<td>YS-AP-102</td>
<td>SN PUMP P-AP-102 MCC</td>
<td>WHITE</td>
<td>3</td>
</tr>
<tr>
<td>YS-AP-103</td>
<td>SN PUMP P-AP-103 MCC</td>
<td>WHITE</td>
<td>4</td>
</tr>
<tr>
<td>YS-AP-104</td>
<td>SN PUMP P-AP-104 MCC</td>
<td>WHITE</td>
<td>5</td>
</tr>
<tr>
<td>YS-AP-105</td>
<td>SN PUMP P-AP-105 MCC</td>
<td>WHITE</td>
<td>6</td>
</tr>
<tr>
<td>YS-AP-106</td>
<td>SN PUMP P-AP-106 MCC</td>
<td>WHITE</td>
<td>7</td>
</tr>
<tr>
<td>YS-AP-107</td>
<td>SN PUMP P-AP-107 MCC</td>
<td>WHITE</td>
<td>8</td>
</tr>
<tr>
<td>YS-AP-108</td>
<td>SN PUMP P-AP-108 MCC</td>
<td>WHITE</td>
<td>9</td>
</tr>
</tbody>
</table>

RECORDS

No records are generated during the performance of this procedure.
Respond to AP Farm Graphic #290 Alarms at the 242-A Evaporator

<table>
<thead>
<tr>
<th>Facility: 242-A Evaporator</th>
<th>RED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic: 290</td>
<td>N/A</td>
</tr>
<tr>
<td>Panel: N/A</td>
<td></td>
</tr>
<tr>
<td>Source: KDC-AP</td>
<td>N/A</td>
</tr>
<tr>
<td>Alarm Class:</td>
<td>Equipment Status</td>
</tr>
<tr>
<td>Alarm Description:</td>
<td>AP FARM GENERAL ALARM (F79): Common alarm for AP Farm, alarms in 241-AP-271 Building. This alarm will also activate in conjunction with some AP Farm alarms.</td>
</tr>
<tr>
<td>Alarm #: N/A</td>
<td></td>
</tr>
<tr>
<td>Setpoint: N/A</td>
<td></td>
</tr>
</tbody>
</table>

Automatic Actions:
None

Immediate Actions:

Probable Causes:
1. A Tank, HVAC, Radiation, or Auxiliary Panel Alarm has activated in building 241-AP-271.
2. The annunciator horn has failed.
3. Electronic failure of this general Alarm.
4. Ongoing maintenance PM.

References:
- Drawings: H-2-99085, Sheet 1
- Documents: None
Respond to AP Farm Graphic #290 Alarms at the 242-A Evaporator

Facility: 242-A Evaporator

<table>
<thead>
<tr>
<th>Graphic</th>
<th>Alarm #</th>
<th>Panel</th>
<th>Setpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>290</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Source:** KM102  
**Setpoint:** N/A

**Alarm Class:** Equipment Status

**Alarm Description:** SN PUMP P-AP-102 MCC (F70)

**Automatic Actions:**


**Immediate Actions:**

- **NOTE** - This alarm is expected when AP02D-WT-P-002 is shutdown with MCC breaker CLOSED/ON.

- [1] **ENSURE** P-AP-102 (G290, F70) status is CF-OFF.

- [2] **IF** transfer is ongoing, **NOTIFY** Shift Manager.

**Probable Causes:**

1. Pump has automatically tripped for one of the following reasons:
   - Motor overload.
   - HI or LOW motor current.
   - Blown MCC breaker control circuit fuse.
2. Mechanical failure of Pump.
3. Instrument malfunction.

**References:**

- **Drawings:** H-2-90476, Sheet 3, H-2-99085, Sheet 2, H-14-020803, Sheet 3
- **Documents:** None
Respond to AP Farm Graphic #290 Alarms at the 242-A Evaporator

Facility: 242-A Evaporator

Graphic: 290  Alarm #: N/A
Panel: N/A  Setpoint: N/A
Source: KM103  Alarm Description: SN PUMP P-AP-103 MCC (F70)

Alarm Class: Equipment Status

Automatic Actions:

Immediate Actions:
NOTE - This alarm is expected when AP03A-WT-P-003 is shutdown with MCC breaker CLOSED/ON.

[1] ENSURE P-AP-103 (G290, F70) status is CF-OFF.

[2] IF transfer is ongoing, NOTIFY Shift Manager.

Probable Causes:
1. Pump has automatically tripped for one of the following reasons:
   - Motor overload.
   - HI or LOW motor current.
   - Blown MCC breaker control circuit fuse.

2. Mechanical failure of Pump.

3. Instrument malfunction.

References:

Drawings: H-2-90476, Sheet 3, H-2-99085, Sheet 2, H-14-020803, Sheet 1
Documents: None
Respond to AP Farm Graphic #290 Alarms at the 242-A Evaporator

Facility: 242-A Evaporator

Graphic: 290  Alarm #: N/A
Panel: N/A  Setpoint: N/A
Source: KM104  Reference: ARP-T-601-290

Alarm Class: Equipment Status

Alarm Description: SN PUMP P-AP-104 MCC (F70)

Automatic Actions:

Immediate Actions:

NOTE - This alarm is expected when AP04A-WT-P-004 is shutdown with MCC breaker CLOSED/ON.

[1] ENSURE P-AP-104 (G290, F70) status is CF-OFF.

[2] IF transfer is ongoing, NOTIFY Shift Manager.

Probable Causes:
1. Pump has automatically tripped for one of the following reasons:
   • Motor overload.
   • HI or LOW motor current.
   • Blown MCC breaker control circuit fuse.
2. Mechanical failure of Pump.
3. Instrument malfunction.

References:
Drawings: H-2-90476, Sheet 3, H-2-99085, Sheet 2, H-14-020803, Sheet 3
Documents: None
Respond to AP Farm Graphic #290 Alarms at the 242-A Evaporator

Facility: 242-A Evaporator

Graphic: 290  Alarm #: N/A
Panel: N/A  Setpoint: N/A

Source: KM105  Alarm Description: SN PUMP P-AP-105 MCC (F70)

Alarm Class: Equipment Status

Automatic Actions:
1. Activates alarm ANN-105-1, SUPERNATE PMP WT-P-005 SHUTDOWN in Building 241-AP-271.

Immediate Actions:
NOTE - This alarm is expected when AP05A-WT-P-005 is shutdown with MCC breaker CLOSED/ON.

[1] ENSURE P-AP-105 (G290, F70) status is CF-OFF.

[2] IF transfer is ongoing, NOTIFY Shift Manager.

Probable Causes:
1. Pump has automatically tripped for one of the following reasons:
   - Motor overload.
   - HI or LOW motor current.
   - Blown MCC breaker control circuit fuse.
2. Mechanical failure of Pump.
3. Instrument malfunction.

References:
Drawings: H-2-90476, Sheet 3, H-2-99085, Sheet 2, H-14-020803, Sheet 2
Documents: None
**Respond to AP Farm Graphic #290 Alarms at the 242-A Evaporator**

**Facility:** 242-A Evaporator

**Graphic:** 290

**Panel:** N/A

**Source:** KM106

**Alarm #:** N/A

**Setpoint:** N/A

**Alarm Description:** SN PUMP P-AP-106 MCC (F71)

**Automatic Actions:**


**Immediate Actions:**

- **NOTE -** This alarm is expected when AP06A-WT-P-006 is shutdown with MCC breaker CLOSED/ON.
  
  [1] **ENSURE** P-AP-106 (G290, F71) status is CF-OFF.

  [2] **IF** transfer is ongoing, **NOTIFY** Shift Manager.

**Probable Causes:**

1. **Pump has automatically tripped for one of the following reasons:**
   - Motor overload.
   - HI or LOW motor current.
   - Blown MCC breaker control circuit fuse.

2. **Mechanical failure of Pump.**

3. **Instrument malfunction.**

**References:**

**Drawings:** H-2-90476, Sheet 3, H-2-99085, Sheet 2, H-14-020803, Sheet 4

**Documents:** None
### Respond to AP Farm Graphic #290 Alarms at the 242-A Evaporator

**Facility:** 242-A Evaporator

<table>
<thead>
<tr>
<th>Graphic:</th>
<th>290</th>
<th>Alarm #:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel:</strong></td>
<td>N/A</td>
<td><strong>Setpoint:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Source:</strong></td>
<td>KM107</td>
<td><strong>Alarm Description:</strong></td>
<td>SN PUMP P-AP-107 MCC (F71)</td>
</tr>
</tbody>
</table>

**Alarm Class:** Equipment Status

**Automatic Actions:**


**Immediate Actions:**

- **NOTE** - This alarm is expected when AP07A-WT-P-007 is shutdown with MCC breaker CLOSED/ON.

1. **ENSURE** P-AP-107 (G290, F71) status is CF-OFF.
2. **IF** transfer is ongoing, **NOTIFY** Shift Manager.

**Probable Causes:**

1. Pump has automatically tripped for one of the following reasons:
   - Motor overload.
   - HI or LOW motor current.
   - Blown MCC breaker control circuit fuse.
2. Mechanical failure of Pump.
3. Instrument malfunction.

**References:**

- **Drawings:** H-2-90476, Sheet 3, H-2-99085, Sheet 2, H-14-020803, Sheet 2
- **Documents:** None
Respond to AP Farm Graphic #290 Alarms at the 242-A Evaporator

Facility: 242-A Evaporator

Graphic: 290  Alarm #: N/A
Panel: N/A  Setpoint: N/A
Source: KM108  Setpoint: N/A

Alarm Class: Equipment Status
Alarm Description: SN PUMP P-AP-108 MCC (F71)

Automatic Actions:

Immediate Actions:
NOTE - This alarm is expected when AP08A-WT-P-008 is shutdown with MCC breaker CLOSED/ON.

[1] ENSURE P-AP-108 (G290, F71) status is CF-OFF.
[2] IF transfer is ongoing, NOTIFY Shift Manager.

Probable Causes:
1. Pump has automatically tripped for one of the following reasons:
   • Motor overload.
   • HI or LOW motor current.
   • Blown MCC breaker control circuit fuse.
2. Mechanical failure of Pump.
3. Instrument malfunction.

References:
Drawings:  H-2-90476, Sheet 3, H-2-99085, Sheet 2, H-14-020803, Sheet 4
Documents: None