## Tank Farm Alarm Response Procedure

**AY/AZ Farm**

### USQ # TF-17-1321-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>J-1</td>
<td>09/20/2017</td>
<td>Change to TFC-PLN-167</td>
<td>Inconsequential Change to update the White Label statement to latest changes to TFC-PLN-167.</td>
</tr>
<tr>
<td>I-0</td>
<td>09/18/2014</td>
<td>Periodic review</td>
<td>No changes identified. Updated footer.</td>
</tr>
<tr>
<td>H-1</td>
<td>05/02/2013</td>
<td>Global Change per ARP-T-251-0003 G-1. Inconsequential change to change procedure use type to Reference.</td>
<td>Change procedure use type in the footer to Reference.</td>
</tr>
</tbody>
</table>

### Graphic #11 Recirc AY2 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>MK-A2Y102K4-1 OE, AY102 Re-circ. Module Damper MK-A2Y102K4-1 Object Error (OE)</td>
<td>Yellow</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>MK-A2Y102K4-2 OE, AY102 Re-circ. Module Damper MK-A2Y102K4-2 Object Error (OE)</td>
<td>Yellow</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>MK-A2Y102K4-3 OE, AY102 Return Damper MK-A2Y102K4-3 Object Error (OE)</td>
<td>Yellow</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>MK-A2Y102K4-4 OE, AY102 Bypass Damper MK-A2Y102K4-4 Object Error (OE)</td>
<td>Yellow</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>PDI-A2Y2-K48-1, LOW, Recirc Condenser A2Y102K4-8-1 Diff. Pressure LOW</td>
<td>Yellow</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>PDI-A2Y2-K48-1, HIGH, Recirc Condenser A2Y102K4-8-1 Diff. Pressure HIGH</td>
<td>Yellow</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>ZA-A2Y2-K4-1A, AY102 Tank Damper Lineup (Fault)</td>
<td>Yellow</td>
<td>9</td>
</tr>
</tbody>
</table>

### Records

No records are generated during the performance of this procedure.
1.0 PURPOSE

1.1 This attachment provides guidance to operators for responding to alarms associated with the AY/AZ ventilation system.

1.2 Section 3.0 provides guidance to operators for starting up the Monitor and Control System so that they may determine current alarm status if the system is not on line when they report to the control room.

2.0 PRECAUTIONS AND LIMITATIONS

2.1 Personnel Safety

2.1.1 Non-electrical worker accessing electrical enclosures must ensure the following:
- The enclosure must have a white label indicating that it has been evaluated.
- The work activity within the enclosure does not involve:
  - Reaching around or moving electrical equipment
  - Contacting electrical connectors/connections
  - By-passing protective shielding/barriers.

2.1.1.1 Stop and notify management if these conditions cannot be met, or if discrepancies exist (e.g., conflicting or missing labels, missing or damaged protective barriers).

3.0 OPERATION

3.1 IF system does not respond and appears to be locked, REFER to procedure TO-060-356, Perform 702-AZ Exhauster Monitor and Control System Operations, for instructions on re-setting and re-booting system AND

RETURN to this procedure.

3.2 OPERATE system in accordance with procedure TO-060-356.
Respond to Monitor Control System Graphic #11 Recirc AY2 Alarms

Facility: 402-AY Recirc Ventilation Bldg

Graphic: 11  Alarm #: MK-AY102K4-1 OE

Source: MK-AY102K4-1  Setpoint: N/A

Alarm Class: Equipment Status
Alarm Description: AY102 Re-circ. Module Damper MK-AY102K4-1 Object Error (OE)

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] FIELD CHECK position of damper MK-AY102K4-1 per operating mode.

<table>
<thead>
<tr>
<th>VALVE No.</th>
<th>MODE OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK-AY102K4-1</td>
<td>RECIRC</td>
</tr>
<tr>
<td></td>
<td>OPEN</td>
</tr>
</tbody>
</table>

[2] IF damper MK-AY102K4-1 is not in the correct position, RE-POSITION per the operating mode.


Possible Causes:

1. Damper MK-AY102K4-1 is not fully open or fully closed, but in some mid position.
2. Failed limit switch.
3. Instrument error.

References:

Drawings: H-14-020106, Sht 2
Documents: None
Facility: 402-AY Recirc Ventilation Bldg

Graphic: 11  
Alarm #: MK-AY102K4-2 OE

Source: MK-AY102K4-2  
Setpoint: N/A

Alarm Class: Equipment Status
Alarm Description: AY102 Re-circ. Module Damper MK-AY102K4-2 Object Error (OE)

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] FIELD CHECK  position of damper MK-AY102K4-2 per operating mode.

<table>
<thead>
<tr>
<th>VALVE No.</th>
<th>MODE OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK-AY102K4-2</td>
<td>RECURS</td>
</tr>
<tr>
<td></td>
<td>OPEN</td>
</tr>
</tbody>
</table>

[2] IF damper MK-AY102K4-2 is not in the correct position, RE-POSITION per the operating mode.


Possible Causes:

1. Damper MK-AY102K4-2 is not fully open or fully closed, but in some mid position.
2. Failed limit switch.
3. Instrument error.

References:

Drawings: H-14-020106, Sht 2
Documents: None
Respond to Monitor Control System Graphic #11 Recirc AY2 Alarms

Facility: 402-AY Recirc Ventilation Bldg

Graphic: 11 Alarm #: MK-AY102K4-3 OE

Source: MK-AY102K4-3 Setpoint: N/A

Alarm Class: Equipment Status
Alarm Description: AY102 Return Damper MK-AY102K4-3 Object Error (OE)

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] FIELD CHECK position of damper MK-AY102K4-3 per operating mode.

<table>
<thead>
<tr>
<th>VALVE No.</th>
<th>MODE OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RECIRC</td>
</tr>
<tr>
<td>MK-AY102K4-3</td>
<td>OPEN</td>
</tr>
</tbody>
</table>

[2] IF damper MK-AY102K4-3 is not in the correct position, RE-POSITION per the operating mode.


Possible Causes:

1. Damper MK-AY102K4-3 is not fully open or fully closed, but in some mid position.
2. Failed limit switch.
3. Instrument error.

References:

Drawings: H-14-020106, Sht 2
Documents: None
Facility: 402-AY Recirc Ventilation Bldg

Graphic: 11  Alarm #: MK-AY102K4-4 OE

Source: MK-AY102K4-4  Setpoint: N/A

Alarm Class: Equipment Status
Alarm Description: AY102 Bypass Damper MK-AY102K4-4 Object Error (OE)

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] FIELD CHECK position of damper MK-AY102K4-4 per operating mode.

<table>
<thead>
<tr>
<th>VALVE No.</th>
<th>MODE OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK-AY102K4-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RECIRC CLOSED</td>
</tr>
<tr>
<td></td>
<td>BYPASS OPEN</td>
</tr>
<tr>
<td></td>
<td>HI HEAT CLOSED</td>
</tr>
</tbody>
</table>

[2] IF damper MK-AY102K4-4 is not in the correct position, RE-POSITION per the operating mode.


Possible Causes:

1. Damper MK-AY102K4-4 is not fully open or fully closed, but in some mid position.
2. Failed limit switch.
3. Instrument error.

References:

Drawings: H-14-020106, Sht 2
Documents: None
**Facility:** 402-AY Recirc Ventilation Bldg

**Graphic:** 11  
**Alarm #:** PDI-AY2K48-1 LOW

**Source:** PDI-AY2K48-1  
**Setpoint:** 2.00 inches WG

**Alarm Class:** Plant Stability  
**Alarm Description:** Recirc Condenser AY102K4-8-1 Diff. Pressure LOW

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

**Automatic Actions:**

None

**Immediate Actions:**

1. ENSURE proper damper alignment.
2. IF all parameters are within specifications, PERFORM the following:
   2.1 CHECK that there is no breach in system.
   2.2 CHECK that there are no equipment malfunctions.
3. NOTIFY Shift Manager of actions and findings.

**Possible Causes:**

1. Breach in condenser AY102K4-8-1.
2. Equipment associated with PDI-AY2K48-1 obstructed.
3. Improper damper configuration.
4. Maintenance or PM.
5. Instrument failure.

**References:**

**Drawings:** H-14-020106, Sht 2  
**Documents:** None
Respond to Monitor Control System Graphic #11 Recirc AY2 Alarms

Facility: 402-AY Recirc Ventilation Bldg

Graphic: 11  Alarm #: PDI-AY2K48-1 HIGH

Source: PDI-AY2K48-1  Setpoint: 18.00 inches WG

Alarm Class: Plant Stability
Alarm Description: Recirc Condenser AY102K4-8-1 Diff. Pressure HIGH

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:


Possible Causes:

1. Condenser shell blockage.
2. High flow through AY102K4-8-1 (flow greater than condenser designed values).
3. Differential pressure instrument isolation valves closed.
4. Differential pressure instrument tubing plugged or damaged.

References:

Drawings: H-14-020106, Sht 2
Documents: None
Respond to Monitor Control System Graphic #11 Recirc AY2 Alarms

Facility: 402-A Y Recirc Ventilation Bldg

Graphic: 11  Alarm #: ZA-A Y2-K4-1A

Source: Numerous Dampers  Setpoint: N/A

Alarm Class: Environmental Impact
Alarm Description: AY102 Tank Damper Lineup (Fault)

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] FIELD CHECK position of the following dampers per operating mode.

<table>
<thead>
<tr>
<th>VALVE No.</th>
<th>MODE OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RECIRC</td>
</tr>
<tr>
<td>MK-A Y102K4-1</td>
<td>OPEN</td>
</tr>
<tr>
<td>MK-A Y102K4-2</td>
<td>OPEN</td>
</tr>
<tr>
<td>MK-A Y102K4-3</td>
<td>OPEN</td>
</tr>
<tr>
<td>MK-A Y102K4-4</td>
<td>CLOSED</td>
</tr>
</tbody>
</table>


Possible Causes:

1. Damper out of specified lineup position for mode required selected.
2. Failed limit switch.
3. Instrument error.

References:

Drawings: H-14-020106, Sht 2
Documents: None