Usq Not Required – ETF is a < Hazard Category 3 Radiological Facility

<table>
<thead>
<tr>
<th>Rev-Mod</th>
<th>Release Date</th>
<th>Justification</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-0</td>
<td>01/25/2016</td>
<td>Conversion to WRPS Format</td>
<td>New Procedure; Supersedes ETF-AR-51379 (ARP-60B-002)</td>
</tr>
</tbody>
</table>

Fine Filter

Alarm

FINE FIL RDY ATTEMPT FAIL VD 12316 .......................................................... 2
FINE FIL OPER ATTEMPT FAIL VD12318 .......................................................... 4
FINE FIL BACKWASH ATTEMPT FAIL VD12320.................................................... 6
FINE FILTER PDAH 60B203 VD12369 ............................................................... 8
FINE FILTER PALX 60B205 VD12374 ............................................................... 9
AUX FINE FILTER PDAH-60B204>AH VD11507 .................................................. 10
AUX FINE FILTER PDAHH-60B204>AHH VD11508 .............................................. 11

Records

No records are generated during the performance of this procedure.
FINE FIL RDY ATTEMPT FAIL
VD12316

DESCRIPTION: Fine Filter Ready Attempt Failure
Setpoint: Logic permissive(s) not met
Alarm Location: Logic generated alarm
Graphic: Alarm Summary Screen
Indications: N/A

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:
1. Fine Filter System goes to SHUTDOWN.
2. Main Treatment Train (MTT) System goes to READY.

Immediate Actions:
[1] CONFIRM Compressed Air System is available per ETF-01B-001.
[2] ENSURE AUTO setting and status of valve positions on necessary air-operated valves (AOV) and solenoid operated valve (SOV) per ETF-60-002.
[3] CHECK status of the following valves and other system valves per ETF-60-006.
   • 60B-036
   • 60B-045.
[4] ON group display 15, CONFIRM the following are ON:
   • LSH-60B211
   • LSH-60B212
     OR
   ON graphic Fine Filter, CONFIRM the following are ON:
   • LSH211
   • LSH212.

(Continued on Next Page)
FINE FIL RDY ATTEMPT FAIL
VD12316

DESCRIPTION: Fine Filter Ready Attempt Failure
Setpoint: Logic permissive(s) not met
Alarm Location: Logic generated alarm
Graphic: Alarm Summary Screen
Indications: N/A

Possible Causes:
1. Compressed air is not in OPERATION.
2. Remote valve position indication malfunctioning.
3. Auto is not selected for fine filter system AOVs.
4. Level switch LSH-60B211 or LSH-60B212 is not functioning.
5. Valve misalignment.

References:
Drawings: None
Documents: ETF-01B-001, Compressed Air System Operations
ETF-60-002, Integrated MTT Operation
ETF-60-006, Initial MTT Lineup in Configuration 1
FINE FIL OPER ATTEMPT FAIL
VD12318

DESCRIPTION: Fine Filter Operation Attempt Failure
Setpoint: Logic permissive(s) not met
Alarm Location: Logic generated alarm
Graphic: Alarm Summary Screen
Indications: N/A

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:
1. Fine Filter System goes to SHUTDOWN.
2. MTT System goes to READY.

Immediate Actions:
[1] CONFIRM Compressed Air System is available per ETF-01B-001.
[2] ENSURE AUTO setting and status of valve positions on necessary AOVs and SOV per ETF-60-002.
[3] CHECK status of the following valves and other system valves per ETF-60-006:
   • 60B-036
   • 60B-045.
[4] ON group display 15, CONFIRM the following are ON:
   • LSH-60B211
   • LSH-60B212

   OR

   ON graphic Fine Filter, CONFIRM the following are ON:
   • LSH211
   • LSH212.

(Continued on Next Page)
FINE FIL OPER ATTEMPT FAIL
VD12318

DESCRIPTION:  Fine Filter Operation Attempt Failure
Setpoint: Logic permissive(s) not met
Alarm Location: Logic generated alarm
Graphic: Alarm Summary Screen
Indications: N/A

Possible Causes:

1. Compressed air is not in OPERATION.
2. AUTO is not selected for fine filter system AOVs and SOV.
4. Following valves not positioned for OPERATION within five minutes:
   - AOV-60B034
   - AOV-60B037
   - AOV-60B038
   - AOV-60B039.
5. Level switch LSH-60B211 or LSH-60B212 is not functioning.
6. Valve misalignment.

References:

Drawings: None
Documents: ETF-01B-001, Compressed Air System Operations
ETF-60-002, Integrated MTT Operation
ETF-60-006, Initial MTT Lineup in Configuration 1
FINE FIL BACKWASH ATTEMPT FAIL
VD12320

DESCRIPTION: Fine Filter Backwash Attempt Failure
Setpoint: Logic permissive(s) not met
Alarm Location: Logic generated alarm
Graphic: Alarm Summary Screen
Indications: N/A

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:
1. Fine Filter System goes to SHUTDOWN.
2. MTT System goes to READY.

Immediate Actions:
[1] CONFIRM compressed air system is in OPERATION per ETF-01B-001.
[2] CHECK for fine filter low air pressure alarm, PALX 60B205.
[3] ENSURE AUTO setting and status of valve positions on necessary AOVs and SOV per ETF-60-002.
[4] CHECK status of the following valves and other system valves per ETF-60-006:
   • 60B-036
   • 60B-045.

(Continued on Next Page)
FINE FIL BACKWASH ATTEMPT FAIL
VD12320

DESCRIPTION: Fine Filter Backwash Attempt Failure
Setpoint: Logic permissive(s) not met
Alarm Location: Logic generated alarm
Graphic: Alarm Summary Screen
Indications: N/A

Possible Causes:
1. Remote valves are taken out of AUTO.
2. Compressed air is not in OPERATION.
3. Backwash is not completed within MCS allotted time.
4. AOVs and SOV valve position indicator malfunctioning.
5. PCV-60B053 not set at 85 to 90 psig.
6. Backwash air pressure, PI-60B-205, is less than 75 psig before AOV-60B040 is opened.
7. Valve misalignment.

References:
Drawings: None
Documents: ETF-01B-001, Compressed Air System Operations
ETF-60-002, Integrated MTT Operation
ETF-60-006, Initial MTT Lineup in Configuration 1
**Description:**
Fine Filter Differential Pressure HI (PDAH-60B203)

**Setpoint:**
80 psig

**Alarm Location:**
MCS calculated value, based on PIT-60B201 and PIT-60B202 inputs

**Graphic:**
Alarm Summary Screen

**Indications:**
N/A

**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. **IF** high differential pressure (dP) occurs when taking filter into SHUTDOWN, **PERFORM** no other actions **AND**
   **EXIT** this procedure.

2. **IF** high dP occurs other than when taking filter into SHUTDOWN, **PERFORM** the following:
   2.1 **PERFORM** filter backwash per ETF-60-002.
   2.2 **IF** filter dP does not return to NORMAL after backwash, **NOTIFY** SOM to determine whether to chemically clean filter per ETF-60B-002.
   2.3 **IF** filter dP does not return to NORMAL after cleaning, **SHUT DOWN** the Fine Filter System.

3. **NOTIFY** Design Authority to investigate filter high dP.

**Possible Causes:**

1. Buildup of solids on filter.
2. Faulty pressure transmitter, PIT-60B201 or PIT-60B202.
3. Normal pressure buildup when MTT taken to SHUTDOWN.

**References:**

- **Drawings:** None
- **Documents:** ETF-60-002, Integrated MTT Operation
  ETF-60B-002, Rough/Fine Filter Chemical Cleaning and Layup
FINE FILTER PALX 60B205
VD12374

DESCRIPTION: Fine Filter Air Pressure Low (PAL-60B205)
Setpoint: 75 psig
Alarm Location: PIT-60B205
Graphic: Alarm Summary Screen
Indications: N/A

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:

1. Fine Filter System will go to SHUTDOWN mode from BACKWASH mode.

Immediate Actions:

[1] CONFIRM Compressed Air System is available per ETF-01B-001.
[2] CONFIRM PCV-60B053 is adjusted to 90 psig (85 to 95 psig).
[3] CONFIRM SOV-60B051 is working properly (indications such as PI-60B205 reading 85 to 95 psi).
[4] ENSURE PIT-60B-205 isolation valve, V-PIT60B205-B, is OPEN.

Possible Causes:

1. PCV-60B053 is malfunctioning, or incorrectly set.
2. Pressure transmitter, PIT-60B-205, malfunctioning.
3. Loss of compressed air.
4. Incorrect valving.

References:

Drawings: None
Documents: ETF-01B-001, Compressed Air System Operations
AUX FINE FILTER PDAH-60B204>AH VD11507

DESCRIPTION: Auxiliary Filter Differential Pressure HI (PDAH-60B204)
   Setpoint: 40 psig
   Alarm Location: PDIT-60B204
   Graphic: Alarm Summary Screen
   Indications: N/A

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:
   [5] IF high dP occurs when taking filter into SHUTDOWN, PERFORM no other actions AND
       EXIT this procedure.
   [6] IF high dP occurs other than when taking filter into SHUTDOWN, NOTIFY SOM for filter element changeout.

Possible Causes:
   1. Buildup of solids on filter.
   2. Faulty pressure transmitter, PDIT-60B-204.
   3. Normal pressure buildup when MTT taken to SHUTDOWN.

References:
   Drawings: None
   Documents: None
AUX FILTER PDAH-60B204>AHH VD11508

DESCRIPTION: Auxiliary Filter Differential Pressure HI HI (PDAH-60B204)
Setpoint: 75 psig
Alarm Location: PDIT-60B204
Graphic: Alarm Summary Screen
Indications: N/A

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] IF high dP occurs when taking filter into SHUTDOWN, PERFORM no other actions AND
EXIT this procedure.

[2] IF high dP occurs other than when taking filter into SHUTDOWN, PERFORM the following:

[2.1] PLACE MTT in READY.
[2.2] SHUT DOWN Auxiliary Filter System.
[2.3] NOTIFY SOM for filter element changeout.

Possible Causes:

1. Buildup of solids on filter.
2. Faulty pressure transmitter, PDIT-60B204.
3. Normal pressure buildup when MTT taken to SHUTDOWN.

References:

Drawings: None
Documents: None