242-A Evaporator Pre-Start Activities

Tank Farm Plant Operating Procedure 242-A Evaporator

USQ # EV-18-0781-S, R0

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1.0 PURPOSE AND SCOPE

1.1 Purpose

To provide the operational and performance requirements that must be met prior to authorization to change to OPERATION Mode or performing other activities that are prohibited in SHUTDOWN Mode.

1.2 Scope

This procedure identifies pre-requisites which must be met prior to authorizing transition of the 242-A Evaporator from SHUTDOWN Mode to OPERATION Mode.

2.0 INFORMATION

2.1 General Information

2.1.1 If the process condensate transfer electronic leak detection system is not available for use, an alternate leak detection method as allowed by the Resource Conservation and Recovery Act (RCRA) permit will be required. When transferring process condensate to LERF, a visual inspection for liquid in the LERF Catch Tank (60M-TK-1) sight glass located at Basin 43 must be performed. A temporary round sheet will need to be issued to perform the surveillance.

3.0 PRECAUTIONS AND LIMITATIONS

3.1 Limits

HNF-15279, Technical Safety Requirements for the 242-A Evaporator

LCO 3.1 C-A-1 Vessel Flammable Gas Control System

LCO 3.2 C-A-1 Vessel Waste High Level Control System

LCO 3.3 C-A-1 Vessel Seismic Dump System

SAC 5.8.2 Evaporator and Pump Room Access and Pump Room Cover Block Control

SAC 5.8.3 Evaporator and Pump Room Transient Combustible Material Controls.
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4.0 PREREQUISITES

4.1 Performance Documents

The following procedures may be required to perform this procedure:

- ETF-60M-002, Waste Transfers at LERF Basin
- TO-600-005, 242 A Perform Evaporator Operability Checks
- TO-600-010, Perform Initial Valving Verification for 242-A Evaporator Startup
- TO-600-015, Perform Initial Electrical Verification for 242-A Evaporator Startup
- TO-600-020, Perform 242-A Evaporator System Status Check and Pre-Start Operations
- TO-230-225, Evaporator Campaign Monitoring.
- TO-600-300, Perform Closeout Inspection in Evaporator Room and Pump Room
5.0 PROCEDURE

5.1 Verify Building Readiness for Startup

5.1.1 CONFIRM Checklist 1 has been completed.

5.2 Records

5.2.1 PERFORM the following for records identified within this procedure.

5.2.1.1 RECORD the number of times the record was generated in applicable column.

OR

PLACE a check mark (✓) in the N/A column.

5.2.1.2 SUBMIT the package for verification of completed records.

<table>
<thead>
<tr>
<th>Records Submittal Checklist</th>
<th>Number of times completed</th>
<th>N/A (✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checklists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checklist 1 - 242-A Start-Up Prerequisites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FWS/OE/Shift Manager SEND the completed records to the Central Shift Office for records retention.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FWS/OE/Shift Manager

Print (First and Last) / Date

The record custodian identified in the company-level Records Inventory and Disposition Schedule (RIDS) is responsible for record retention in accordance with TFC-BSM-IRM_DC-C-02.
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## Checklist 1 - 242-A Start-Up Prerequisites

<table>
<thead>
<tr>
<th>242-A START-UP PREREQUISITES CHECKLIST</th>
<th>1st Shift Manager (Print First &amp; Last) Sign/Date/Time</th>
<th>2nd Shift Manager (Print First &amp; Last) Sign/Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO-600-002</td>
<td>Complete ✓</td>
<td></td>
</tr>
<tr>
<td>TO-600-005</td>
<td>Complete ✓</td>
<td></td>
</tr>
<tr>
<td>TO-600-010</td>
<td>Complete ✓</td>
<td></td>
</tr>
<tr>
<td>TO-600-015</td>
<td>Complete ✓</td>
<td></td>
</tr>
<tr>
<td>TO-600-020</td>
<td>Complete ✓</td>
<td></td>
</tr>
<tr>
<td>ETF-60M-002</td>
<td>Complete ✓</td>
<td></td>
</tr>
<tr>
<td>TO-600-300</td>
<td>Complete ✓</td>
<td></td>
</tr>
</tbody>
</table>

Total heat of combustion of transient combustible materials in the evaporator room and in the pump room is determined and compared to the limits in a calculation documented in accordance with TFC-ENG-DESIGN-C-10, Engineering Calculations. (SAC 5.8.3) Complete ✓

**TO-230-225**

Prerequisites Complete & Monitoring Initiated ✓ (N/A if not required)

Johnson Controls notified of Steam Demands.

Water Services notified of Raw Water Demands.
## 242-A Evaporator Pre-Start Activities

### Checklist 1 - 242-A Start-Up Prerequisites (Cont.)

<table>
<thead>
<tr>
<th>242-A START-UP PREREQUISITES CHECKLIST (Cont.)</th>
<th>I&lt;sup&gt;st&lt;/sup&gt; Shift Manager (Print First &amp; Last) Sign/Date/ Time</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Shift Manager (Print First &amp; Last) Sign/Date/ Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETF Control Room operator notified of water use to TEDF / LERF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Work Week Manager notified of intent to start-up AW-102 air lift circulator (ALC)  
  - Schedule IHT ALC baseline readings  
  - Schedule IHT campaign monitoring. | | |

<table>
<thead>
<tr>
<th>Reviews Complete</th>
<th>I&lt;sup&gt;st&lt;/sup&gt; Shift Manager (Print First &amp; Last) Sign/Date/ Time</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; Shift Manager (Print First &amp; Last) Sign/Date/ Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSM Logbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCRs, PERs, other equipment deficiencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Arrows, Standing Orders, Action Tracking Binders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>242-A SM Logbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evap Ops (A-1) Logbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shift Instructions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### System engineer has activated all safety significant SSCs in SECD prior to declaring Operations. Mode. If safety significant SSCs are not activated for any reason track above requirement with a Red Arrow. (LCO 3.1, LCO 3.2, LCO 3.3).

### Process Memo and Process Control Plan Issued by Engineering for this Campaign.

### Waste Compatibility Assessment issued by Engineering for this Campaign.

### Per Step 2.1.1

Electronic process condensate transfer leak detection system will be used for this campaign.

Check (✓) Applicable

### OR

Temporary round sheet in place.

All 242-A Pump Room Coverblocks Verified in Place prior to declaring Operations Mode. If Coverblocks are removed during start-up for maintenance (e.g. leak checks), track above requirement with a Red Arrow. (SAC 5.8.2)

Evaporator room doors (outer door 108 in the airlock at grade and outer door 402 in the airlock at the 40 ft-6 in. level) closed and locked. (SAC 5.8.2)