2025E Building Carrier Model 39NXR09LFA 45B-EVU-9 and 45B-EVU-10

Tank Farm Maintenance Procedure

Effluent Treatment Facility

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-1</td>
<td>07/28/2016</td>
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<td>Change from continuous use to reference use per document owner’s direction.</td>
</tr>
<tr>
<td>A-0</td>
<td>10/29/2015</td>
<td>Converting to WRPS Format</td>
<td>New Procedure; Supersedes ETF-PRO-MN-51477 (EL23031)</td>
</tr>
</tbody>
</table>

Table of Contents

1.0 PURPOSE AND SCOPE ........................................................................................................2
   1.1 Purpose .........................................................................................................................2
   1.2 Scope ...........................................................................................................................2

2.0 INFORMATION ....................................................................................................................2

3.0 PRECAUTIONS AND LIMITATIONS .................................................................................3
   3.1 Personnel Safety .........................................................................................................3
   3.2 Radiation and Contamination Control .......................................................................3
   3.3 Environmental Compliance .....................................................................................3

4.0 PREREQUISITES ...............................................................................................................4
   4.1 Special Tools, Equipment and Supplies ..................................................................4
   4.2 Performance Documents ..........................................................................................4

5.0 PROCEDURE ....................................................................................................................5
   5.1 Unit Checks ...............................................................................................................5
   5.2 Restoration ...............................................................................................................7
   5.3 Acceptance Criteria .................................................................................................7
   5.4 Review ....................................................................................................................7
   5.5 Records ...................................................................................................................7
1.0 PURPOSE AND SCOPE

1.1 Purpose

This procedure provides instructions for the performance of maintenance requirements on air handling units EVU-9 and -10 for Building 2025E.

Unit 45B-EVU-9 includes the following:
- 45B-F-5 (fan)
- 45B-FL-6 (filter)
- 45B-CC-5 (cooling coil).

Unit 45B-EVU-10 includes the following:
- 45B-F-6 (fan)
- 45B-FL-7 (filter)
- 45B-CC-6 (cooling coil).

1.2 Scope

This procedure provides instructions for checking air handling units EVU-9 and -10 for the following:
- Leaks
- Cleaning coils
- Replacing filters
- Checking belts
- Checking sheaves.

Air handling units EVU-9 and EVU-10 are located in an RCA.

2.0 INFORMATION

None.
3.0 PRECAUTIONS AND LIMITATIONS

3.1 Personnel Safety

**WARNING** - The EVU-9 and EVU-10 are a permit-required confined space and failure to have IH evaluate the confined space per DOE-0360 prior to entry may result in personnel injury or death.

3.1.1 Lock and tag protects against temperature, pressure or hazardous chemicals before breaching the system. Under these circumstances, lock and tag is required in accordance with procedure DOE 0336, Hanford Site Lockout/Tagout Procedure.

3.2 Radiation and Contamination Control

3.2.1 Work in radiological areas will be performed using a radiological work permit following review by Radiological Control per ALARA Work Planning procedure, TFC-ESH-RP_RWP-C-03.

3.3 Environmental Compliance

3.3.1 In the event of a spill/leak/release, notify the SOM/FWS and respond per ETF-ERP-85B-003, Emergency Spill or Release at ETF.
4.0 PREREQUISITES

4.1 Special Tools, Equipment and Supplies

The following supplies may be needed to perform this procedure:

Belts:
- 45B-EVU-9, one size B37 Catalog ID 591641
- 45B-EVU-10, one size B37 Catalog ID 591641.

Filters:
- 45B-EVU-9, one 16" x 25" x 2" 30% filter (Catalog ID 591648)
- Two 20" x25" x2" 30% filters (Catalog ID 591669)
- 45B-EVU-10, one 16" x 25" x 2" 30% filter (Catalog ID 591648)
- Two 20" x25" x2" 30%, filters (Catalog ID 591669)
- Chevron SRI grease NLGI 2 (MSDS/SDS #010630).

4.2 Performance Documents

The following documents may be needed to perform this procedure:
- DOE-0336, Hanford Site Lockout/Tagout Procedure
- DOE-0360, Hanford Site Confined Space Procedure (HSCSP)
- H-2-89096, One Line Diagram MCC-4
- H-2-89097, Electrical MCC Schedule.
5.0 PROCEDURE

5.1 Unit Checks

Special Instructions

Section 5.1 is performed either for 45B-EVU-9 or 45B-EVU-10 individually, or is repeated when both units are inspected.

5.1.1 APPLY lock and tag per DOE-0336.

WARNING

The EVU-9 and EVU-10 are a permit-required confined space and failure to have IH evaluate the confined space per DOE-0360 prior to entry may result in personnel injury or death.

5.1.2 ENSURE Hanford Confined Space Entry Permit is completed prior to entry.

5.1.3 REMOVE belt.

NOTE - Steps 5.1.4 through 5.1.17 may be performed in any logical order.

_____ 5.1.4 INSPECT sheave for the following:
- Wear
- Alignment
- Loose fasteners.

_____ 5.1.5 RECORD description of excessive wear in work package.

_____ 5.1.6 REPLACE V-belt AND

ADJUST tension to approximately 1/4-inch deflection.

_____ 5.1.7 LUBRICATE fan drive bearings using Chevron SRI grease NLGI 2.

_____ 5.1.8 INSPECT wiring to fan for the following:
- Deterioration
- Loose connection(s).

_____ 5.1.9 INSPECT coil(s) for the following:
- Leaks
- Cleanliness.
5.1 Unit Checks (Cont.)

_____ 5.1.10 IF coil leaks are found, NOTIFY FWS to initiate work package for repairs.

_____ 5.1.11 CLEAN coil(s) with high pressure water when needed.

_____ 5.1.12 INSPECT the following for proper drainage when needed:
   • Condensate pan(s)
   • Associated piping.

_____ 5.1.13 FLUSH the following with fresh water when needed:
   • Drains
   • Drain pans.

_____ 5.1.14 REPLACE intake air filters.

_____ 5.1.15 INSPECT all damper linkages for proper operation, AND
       CLEAN AND LUBRICATE.

_____ 5.1.16 REMOVE lock and tag per DOE-0336.

_____ 5.1.17 RESTART air handling unit AND
       OBSERVE for proper operation.

5.1.18 IF both units are to be inspected, REPEAT Step 5.1.1 through Step 5.1.17 for second unit.
5.2 Restoration

5.2.1 RESTORE to as-found conditions.

5.2.2 INFORM SOM that test is complete and instrument/equipment/system may be returned to service.

5.3 Acceptance Criteria

Acceptance criteria has been met when steps in this procedure have been satisfactorily performed and results are recorded on the data sheet(s).

5.4 Review

5.4.1 INFORM FWS test is complete.

5.4.2 (FWS) REVIEW AND ENSURE the following:

- Completed data sheets meet the acceptance criteria
- Comments sections are filled out appropriately
- Work requests needed as a result of this procedure are identified and generated
- Work request number(s) of any work documents generated as a result of this procedure, are recorded in the Comments/Remarks section of the data sheet.

5.5 Records

The performance of this procedure generates no records. However PM data sheets associated with the procedure are records and are maintained in the work package as record material.

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.