Monitor Waste Storage Tank Oil Seal Loop

VENTILATION

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1.0 PURPOSE AND SCOPE

1.1 Purpose

This procedure provides instructions for surveillance of waste storage tank seal loops.

1.2 Scope

This procedure applies to High Efficiency Particulate Air (HEPA) breather filters installed on the following:

- East Area SSTs
- West Area SSTs
- 244-A Lift Station.

This procedure also applies to High Efficiency Particulate Air (HEPA) breather filters installed on 213-W TK-1 catch tanks and the East/West Vent Station and Diversion Box.

2.0 INFORMATION

None
3.0 PRECAUTIONS AND LIMITATIONS

3.1 Personnel Safety
3.1.1 Contact Industrial Hygiene for appropriate Industrial Hygiene Sample Plan.

3.2 Radiation and Contamination Control
3.2.1 Any leaks of seal loop moisture should be considered potentially contaminated until surveyed and proven otherwise by an HPT.
3.2.2 Work in radiological areas will be performed using a radiological work permit following review by Radiological Control per ALARA Work Planning procedure, TFC-ESHQ-RP_RWP-C-03.
3.2.3 This procedure is limited to radiological areas and work activities screened in accordance with TFC-ESHQ-RP_RWP-C-03.

3.3 Environmental Compliance
3.3.1 If a sight glass is damaged or in a condition that it cannot be filled and is not performing its intended function, Environmental Compliance must be notified per the Environmental Compliance On-Call List in accordance with procedure TFC-ESHQ-ENV_FS-C-01.
3.3.2 Immediately report any spills to Environmental On-Call in accordance with TFC-ESHQ-ENV_FS-C-01, Environmental Notification.

3.4 Limits
RPP-16922, ENVIRONMENTAL SPECIFICATIONS REQUIREMENTS
4.0 PREREQUISITES

4.1 Special Tools, Equipment and Supplies

The following supplies will be needed to perform this procedure:

- Dow Corning 200 Silicone Fluid (GHS-SDS and/or MSDS 020765) (approximately 12 oz. per loop seal)
- Polyethylene squeeze bottle (one liter size) w/Tygon tube
- Appropriate Round Sheet referenced from Operator Rounds Table 1
- Approved waste storage container from EWO.

4.2 Performance Documents

The following procedures will be needed to perform this procedure:

- TO-100-052, Perform Waste Generation, Segregation, Accumulation and Clean-up
- TF-OR-WR-AN, AN Weekly Rounds
- TF-OR-WR-AZ, AZ Weekly Rounds
- TF-OR-WR-EV, EV Weekly Rounds
- TF-OR-WR-ST, ST Weekly Rounds
- TF-OR-QR-AN, AN Quarterly Rounds
- TF-OR-QR-AZ, AZ Quarterly Rounds
- TF-OR-QR-EV, EV Quarterly Rounds
- TF-OR-QR-ST, ST Quarterly Rounds
5.0 PROCEDURE

5.1 Perform Surveillance

NOTE - The filter assemblies are shown in Figure 1 and Figure 2.
- Surveillance of all tank oil seal loops listed in Table 1 shall take place per noted periodicities.
- Valve V-104 is labeled as “Oil Fill”, but it is also used as a sample valve.
- Seal Loop Isolation Valve V-105 is found on the 244-A Lift Station only.

5.1.1 OBTAIN list of tanks to be monitored daily from Shift Manager/OE.

5.1.2 CHECK positions of the 244-A Lift Station sample valve V-104, and seal loop isolation valve V-105.

5.1.3 CHECK position of sample valve V-104. (See Figure 1 through Figure 3.)
NOTE - On SSTs sample valve V-104 is a two-way valve whose handles indicate the set position (i.e., OPEN is in line with the pipe section and CLOSED is perpendicular).
- On the 244-A Lift Station DCRT, sample valve V-104 and seal loop isolation valve V-105 are two-way valves whose handles indicate the set position.

5.1.4 CLOSE sample valve V-104.

5.1.5 RECORD position of the following on appropriate Round Sheet, per Table 1.
- Sample valve V-104
- Seal loop isolation valve V-105 (244-A Lift Station only).

5.1.6 IF the 244-A Lift Station seal loop isolation valve V-105 is CLOSED, NOTIFY Shift Manger/OE.

5.1.7 VISUALLY INSPECT the polyethylene legs of the oil seal loop pressure relief assembly where appropriate. (RPP-16922)
5.1 **Perform Surveillance (Cont.)**

**NOTE** - Liquid should be visible in at least one leg (example: The liquid levels will be equal if there is no pressure differential between the inside and outside atmosphere).

5.1.8 **VISUALLY INSPECT** liquid level in seal loop sight glass **AND**

**OBSERVE** the vent hole on top of the sight glass is open to the atmosphere. (RPP-16922)

5.1.9 **IF** sight glass has become discolored, **NOTIFY** Shift Manager.

5.1.10 **IF** oil seal loop is empty, **NOTIFY** Shift Manager **AND**

As directed, **REQUEST** IHT to monitor for flammable gas at the breather filter prior to adding oil (silicon fluid) to the seal loop.

5.1.10.1 **IF** flammable gas readings exceed 25% LFL, **NOTIFY** Shift Manager/OE **AND**

**STOP** work.

5.1.11 **IF** oil seal loop is empty or low, **REFILL** seal loop as follows:

5.1.11.1 **INSTALL** ground cover around fill area.

5.1.11.2 **FILL** a one-liter polyethylene squeeze bottle with Dow Corning 200 silicone fluid.

5.1.11.3 **FILL** seal loop by inserting polyethylene squeeze bottle tube into seal loop outlet port and squeezing bottle.

5.1.11.4 **RECORD** in appropriate Round Sheet referenced in Table 1.

5.2 **Records**

**NOTE** - No records are generated during the performance of this procedure.
<table>
<thead>
<tr>
<th>Monitor Waste Storage Tank Oil Seal Loop</th>
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</table>

### Table 1 - Operator Rounds Table

(Fill out for all tanks listed per noted periodicities.)

**EAST and WEST AREA ROUND SHEETS**

- TF-OR-WR-AN, AN Weekly Rounds
- TF-OR-WR-AZ, AZ Weekly Rounds
- TF-OR-WR-EV, EV Weekly Rounds
- TF-OR-WR-ST, ST Weekly Rounds

- TF-OR-QR-AN, AN Quarterly Rounds
- TF-OR-QR-AZ, AZ Quarterly Rounds
- TF-OR-QR-EV, EV Quarterly Rounds
- TF-OR-QR-ST, ST Quarterly Rounds
Monitor Waste Storage Tank Oil Seal Loop

Figure 1 - SST Breather Filter Sketch

Breather Filter Housing

Isolation Valve

Loop Seal
Level Gage
Monitor Waste Storage Tank Oil Seal Loop

Figure 2 - Flanders G-1 Breathing Air Filter Assembly

Note - For Single Shell Tanks, valve V-103 will be a butterfly valve. For the 244-A Lift Station DCRT, valve V-103 will be a gear-driven valve with a position indicator.
Figure 3 - 244-A Breather Filter