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Data Sheet 5 - Leak Detection Monitoring
1.0 PURPOSE AND SCOPE

1.1 Purpose

This procedure provides direction and controls for rinsing pump room and pump room sump, and gravity feeding (overflowing sump) or jetting pump room sump via DR-334 and 241-AW-02D to 241-AW-102.

1.2 Scope

1.2.1 This procedure involves 242-A:
- Pump Room Sump
- Pump room sprays
- Sump Jet Gang Valve system
- Sump water and steam supply
- All associated instrumentation.

1.2.2 This procedure involves DST:
- DR-334
- DR-338
- 241-AW-02D
- Tank 241-AW-102
- All associated instrumentation.
2.0 INFORMATION

2.1 General Information

2.1.1 Direction to rinse the pump room and pump room sump, and jetting or gravity feeding its contents to 241-AW-102 for the purposes of environmental compliance with the Dangerous Waste permit may be provided by Environmental or contained in a Process Memorandum.

2.2 Terms and Definitions

NOTE - Because Tank Farms does not install Calibration/Test Stickers on farm equipment, all calibration/function test verifications must be accomplished using the Work Planning System.

2.2.1 Calibration:
• Preventative Maintenance checks have been performed within required periodicity (calibration is current) with a “satisfactory” result.

2.2.2 Operable:
• Preventative Maintenance checks have been performed within required periodicity (calibrations/functional tests are current) with a “satisfactory” result
• Local alarms (i.e., bells, strobe lights, alarm windows, power indication lights not LIT, etc.) are not in alarm
• Remote alarms (i.e., bells, strobe lights, alarm windows, power indication lights not LIT, etc.) are not in alarm
• Instrument/component being inspected appears to be functioning normally (i.e., charts are inking, annunciator lights work; any associated meters are active, etc.).

2.2.3 Operable (for leak detector probes):
• Functional test completed within 365 days of expected transfer prior to removal of administrative lock for transfer pump
• Instrument appears to be functioning normally (i.e., annunciator lights work, local beacons are not in alarm, any associated meters are active, etc.)
• Failsafe alarm is on, operational, and not in alarm.
2.2 Terms and Definitions (Cont.)

2.2.4 TSR Waste / Environmental Waste

- Material in 242-A Sump may or may not be considered waste for TSR purposes. When the liquid within sump is rinse water, anti-foam, process condensate, and/or seal water it is not considered TSR waste.

- If > 5 gallons (approximate) of tank waste (feed or slurry) material is observed leaking from 242-A Pump Room piping into Pump Room, sump material shall be considered TSR waste and appropriate TSR controls applied for jetting the sump procedure TO-230-226

- Prior to performing this procedure, monitor the history trend on WFI-SUMP1. If the trend level does not indicate an unplanned increase, then sump contents are non-TSR waste.
3.0 PRECAUTIONS AND LIMITATIONS

3.1 Personnel Safety

3.1.1 All activities in this procedure fall within the scope of the General Hazards Analysis.

3.2 Radiation and Contamination Control

3.2.1 When performed without a work package/RWR, this procedure is limited to radiological areas and work activities permitted by a radiological work permit.

3.2.2 If work requires entry into a high contamination, high radiation, or an airborne radioactivity area, an approved work package must be developed that is reviewed by Radiological Control per ALARA work planning procedure TFC-ESHQ-RP_RWP-C-03.

3.2.3 Radiological monitoring requirements including Window-Open and Window-Closed dose rate and associated monitoring frequencies for this transfer are contained in the corresponding Radiological Monitoring plan. Waste transfers according to this procedure can only be performed when coordinated with Radiological Control and the associated monitoring plan.

3.3 Environmental Compliance

NOTE All spills/releases of Dangerous Waste must be reported to the BED; including waste in secondary containment.

3.3.1 Report the following to the appropriate Shift Office per TF-REC-001:
- Major Stack Exhauster Condition (e.g. unplanned shutdown, outage or bypass of control equipment or required stack monitoring)
- Minor Stack Exhauster Condition (e.g. unplanned shutdown, outage or bypass of control equipment or required stack monitoring)
- Spills and Releases
- Transfer/Retrieval Leak Detection
- Primary and Annulus Leak Detection
- 242-A Evaporator Ventilation Conditions.
3.3 Environmental Compliance (Cont.)

3.3.2 The 241-AW Vessel Tank Primary Exhaust system must be operational during waste disturbing activities (e.g., jetting of sump, waste transfers, etc.) within tanks. Jetting of the sump or overflow of the pump room sump contents must not be initiated or allowed to continue if the 241-AW VTP exhauster is not operating.

3.3.3 All tanks and ancillary equipment including piping and pits must be designated as RCRA compliant based on review of the current Tank Farm Routing Board. RCRA compliant includes the following as shown on the current Tank Farm Routing Board:

- “Green” primary transfer lines and pits
- “Blue Dashed” drain line - secondary containment system, non-pressurized lines from the RCRA compliant pits.

3.3.4 Leak detection systems identified in Checklist 1 – Equipment Verification, must be current and within their required periodicity for maintenance for calibration and functional testing, see RPP-16922, Sections 5.3 and 5.4.

3.3.5 Spills, leaks, drips or other releases from waste transfer/process systems to secondary containment or directly to pump room sump (e.g. activation of PSV-PB2-1, sample cabinet rinses, etc.) are considered Dangerous wastes. This includes raw water that has been in contact with waste transfer/process systems in addition to known Dangerous Waste streams of Process Condensate and Double Shell Tank waste. Leaks of Dangerous wastes to secondary containment must be removed within 24 hours or at the earliest practicable time.
3.4 Limits

TECHNICAL SAFETY REQUIREMENTS

HNF-SD-WM- TSR-006, Tank Farms Technical Safety Requirements

SAC 5.8.1 DST Induced Gas Release Event Evaluation

ENVIRONMENTAL, SAFETY, HEALTH AND QUALITY DOCUMENTS

RPP-16922, Environmental Specification Requirements

OPERATING SPECIFICATION DOCUMENT

OSD-T-151-00007 Operating Specifications for the Double-Shell Storage Tanks

DANGEROUS WASTE REGULATIONS OF THE WASHINGTON ADMINISTRATIVE CODE

WAC 173-303-380 Facility Record Keeping

CRITICALITY PREVENTION SPECIFICATION

CPS-T-149-000012 Criticality Prevention Specification For Hanford Tank Farm Facilities
4.0 PREREQUISITES

4.1 Special Tools, Equipment, and Supplies

The following supplies may be needed to perform this procedure:
- Communication device between assigned personnel
- Other tools, equipment, and supplies as identified by 242-A Shift Manager.

4.2 Performance Documents

The following document(s) may be needed to perform this procedure:
- Working copy of this procedure
- TO-600-056, Start Up and Shut Down Evaporator 90 Lb Steam System
- TFC-OPS-OPER-C-22, Control and Use of Administrative Locks
- TF-REC-001, Response to Environmental Condition
- TO-230-226, Perform Tank Farm Monitoring for Jetting of 242-A Pump Room Sump.
4.3 Field Preparation

4.3.1 IF not performing any of the following activities:
   • Jetting sump
     OR
   • Operating pump room sprays while gravity draining sump to 241-AW-102

   GO TO Section 5.4.

4.3.2 IF transferring TSR waste or > 10,000 gallons (SAC 5.8.1) NOTIFY Central Shift Manager to initiate monitoring per TO-230-226 and total volume to be transferred.

4.3.3 NOTIFY AW Area Shift Manager and/or Central Shift Manager that 242-A Pump Room sump is about to be jetted or gravity drained into 241-AW-102.

4.3.4 IF any of the following conditions occurs during performance of this procedure, SHUT DOWN transfer AND

   NOTIFY 242-A Shift Manager:
   • 241-AW-102 Liquid Level reaches 409 inches
   • 241-AW primary ventilation system failure (including record sampler or stack CAM)
   • 241-AW-102 High Pressure alarm PDI-220 activates
   • 241-AW-102 primary tank leak detection fails (Primary Tank Leak detection inoperability or Annulus Probe Leak Detectors)
   • WFI-SUMP does not show decrease 5 minutes after starting JGV-SUMP
   • Pit leak detector is in alarm in 241-AW-02D
   • Loss of alternate leak detector system.

4.3.5 242-A Shift Manager, REVIEW Sections 4.1 through 4.3.4.

4.3.5.1 VERIFY all prerequisites are satisfactorily completed or resolved.

________________________ / ______________________ / ________________
Signature                   Print (First & Last)              Date
242-A Shift Manager
5.0 PROCEDURE

NOTE - Sections of this procedure may be performed independently to operate a system as long as steps in the section are performed in the order written.

5.1 Prepare 241-AW Tank Farm to Receive Transfer

NOTE - Steps 5.1.1 through 5.1.4.3 may be performed in any logical order as directed by 242-A Shift Manager.

5.1.1 PERFORM required equipment checks per Checklist 1.

5.1.2 VERIFY the following items do not impact planned transfer:
- Standing Orders
- Red Arrow entries
- Temp Mods
- Open Action Tracking Binder (ATB).

______________________________ / __________________________ / ________________
Signature Print (First & Last) Date
242-A Shift Manager

5.1.3 PRIOR to draining or jetting the Pump Room Sump, VERIFY 241-AW primary ventilation system is operable. (RPP-16922)

______________________________ / __________________________ / ________________
Signature Print (First & Last) Date
Shift Manager
5.1 Prepare 241-AW Tank Farm to Receive Transfer (Cont.)

5.1.4 IF permanently installed 241-AW-02D leak detector(s) are inoperable, PERFORM the following:

5.1.4.1 REQUEST approval of alternate method of leak detection from Environmental.

5.1.4.2 ENSURE approved alternate method of leak detection is installed and operable.

5.1.4.3 RECORD alternate method of leak detection used on Data Sheet 1.

5.1.5 REVIEW Section 5.1 AND VERIFY all steps are satisfactorily completed.

________________________ / ______________________ / ____________
Signature                  Print (First & Last)                Date
242-A Shift Manager
5.2 Prepare to Rinse and Jet Pump Room Sump

5.2.1 **ENSURE** Sections 4.3 and 5.1 have been completed.

5.2.2 **CONFIRM** steam has been valved to the steam jets per TO-600-056.

5.2.3 **PERFORM** valving per Checklist 2.

5.2.4 **IF** transferring TSR waste or > 10,000 gallons, **ENSURE** Tank Farm monitoring is ongoing per TO-230-226 and Tank Farms is ready to receive 242-A Pump Room sump contents into 241-AW-102.

5.2.5 **ENSURE** Central Shift Manager has been contacted and Tank Farms is ready to monitor leak detectors per Data Sheet 4 or Data Sheet 5.

5.2.6 **COMPLETE** Data Sheet 5 during jet-out activity.

5.2.7 **OBTAIN** 242-A Shift Manager authorization to remove administrative lock from valve 5-46.

5.2.8 **REMOVE** administrative lock from valve 5-46 in accordance with Administrative Lock Program from TFC-OPS-OPER-C-22.

5.2.9 **IF** transferring TSR waste, **NOTIFY** Central Shift Manager of date and time Administrative Lock was removed.

5.2.10 **OPEN** valve 5-46.
5.2 Prepare to Rinse and Jet Pump Room Sump (Cont.)

5.2.11 RECORD the following initial readings on Data Sheet 2:

- Pump Room Sump level from WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR
- 241-AW-102 level from TMACS, manual tape, ENRAF field reading
- Pump Room atmospheric pressure from local gauge PDIT-K1-304/PDSL-K1-304, located in HVAC Room or PDIC-K1-304 on VCS HMI
- 241-AW-102 tank pressure from recorder PR-102-1, located on Panel 102 in 241-AW Farm Instrument Building or 241-AW-102 AW tank pressure from the TFMCS HMI or from PDI-220 (G301, F0/12) AW-102 FEED TANK PRESSURE (G301, F0/12).

5.2.12 CONFIRM 241-AW-102 pressure is less than Pump Room atmospheric pressure and record on Data Sheet 2.

5.2.13 IF performing Triple Rinse of Pump Room Sump, GO TO Section 5.4.
5.3 Add Water and Jet-Out Pump Room Sump to 241-AW-102

Special instructions

Water may be added to sump at any time as directed by Shift Manager. RECORD directions.

5.3.1 IF liquid addition to sump is required, PERFORM the following actions:

5.3.1.1 SET HV-SUMP-1 (G12/11, F7/5) SUMP RAW WATER VALVE to CF-OPEN.

5.3.1.2 MONITOR WFI-SUMP1 (G12, F7/2) PUMP RM CORRECTD WT FACTR for increasing Sump level.

5.3.1.3 AFTER WFI-SUMP1 reaches 34 to 44 in., or level specified by 242-A Shift Manager/Process Memo, SET HV-SUMP-1 to CF-CLOSE.

5.3.2 IF jetting the sump is required, PRIOR to starting this section, ENSURE Section 4.3, 5.1, and 5.2 have been completed.

5.3.3 MONITOR Checklist 1 equipment during jet-out activity AND CONFIRM readings stay within normal operating parameters.

NOTE - When jetting is stopped, the MCS program will automatically perform an air blowdown of the sump jet as part of the shutdown process.

5.3.4 START Pump Room Sump Jet as follows:

5.3.4.1 SET JGV-SUMP (G12/10, F7/1) SUMP TRANSFER JG-VALVE to ON.

5.3.5 MONITOR WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR or WFI-SUMP1 Current Trend display (Current Trend #9) for decreasing Sump level.

5.3.6 IF WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR does not decrease after 5 minutes, PERFORM the following actions:

5.3.6.1 SET JGV-SUMP (G12/10, F7/1) SUMP TRANSFER JG-VALVE to OFF.

5.3.6.2 NOTIFY 242-A Shift Manager of failed jetting.
5.3 Add Water and Jet-Out Pump Room Sump to 241-AW-102 (Cont.)

NOTE - 241-AW-102 Tank High Pressure Alarm occurs at -0.50 in. WG.

- When WFI-SUMP1 decreases below 20 in., Sump overflow lines will lose their loop seals and air will be pulled from the Pump Room to 241-AW-102 by the 241-AW Farm K1 Exhausters. When this occurs it is possible 241-AW-102 Tank Pressure may increase.

5.3.7 MONITOR 241-AW-102 pressure on PDI-220 (G301, F0/12) AW-102 FEED TANK PRESSURE during sump jetting,

OR

REQUEST Tank Farm Operator monitor 241-AW-102 AW tank pressure on the TFMCS HMI or 241-AW-102 pressure on pressure recorder PR-102-1 during Sump jetting.

5.3.8 IF tank pressure goes positive, SET JGV-SUMP (G12/10, F7/1) SUMP TRANSFER JG-Valve to OFF AND

ADD water to re-establish seal as follows:

5.3.8.1 SET HV-SUMP-1 (G12/11, F7/5) SUMP RAW WATER VALVE to CF-OPEN.

5.3.8.2 MONITOR WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR for increasing Sump level.

5.3.8.3 AFTER WFI-SUMP1 reaches 34 to 44 in., or level specified by 242-A Shift Manager/Process Memo, SET HV-SUMP-1 to CF-CLOSD.

NOTE - When jetting is stopped, the MCS program will automatically perform an air blowdown of the sump jet as part of the shutdown process.

5.3.9 WHEN WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR reads less than 4 in. or WFI-SUMP1 Current Trend display (Current Trend #9) has leveled off, PERFORM the following actions:

5.3.9.1 WAIT approximately 1 minute.

5.3.9.2 SET JGV-SUMP (G12/10, F7/1) SUMP TRANSFER JG-VALVE to OFF.

5.3.9.3 IF transferring TSR waste or > 10,000 gallons (SAC 5.8.1) NOTIFY Central Shift Manager total volume transferred.
5.3 Add Water and Jet-Out Pump Room Sump to 241-AW-102 (Cont.)

5.3.10 CLOSE valve 5-46.

5.3.11 OBTAIN 242-A Shift Manager authorization to install administrative lock on valve 5-46.

5.3.12 INSTALL administrative lock on valve 5-46 in accordance with Administrative Lock Program from TFC-OPS-OPER-C-22.

5.3.13 IF transferring TSR waste, NOTIFY Central Shift Manager of Date and Time Administrative Lock was installed.

5.3.14 RECORD final readings on Data Sheet 2.

5.3.15 IF directed by 242-A Shift Manager, SHUT DOWN 90 lb. steam to steam jets per TO-600-056.

________________________ / __________________________ / __________
Signature                  Print (First & Last)               Date
242-A Shift Manager
5.4 Triple Rinse Pump Room Sump using Cell Sprays

Special instructions

This section shall be performed only at the 242-A Shift Managers direction.

5.4.1 PRIOR to starting this section, ENSURE Section 4.3, 5.1, and 5.2 have been completed.

5.4.2 RECORD initial Pump Room Sump level from WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR and LI-SUMP1 (G12, F7/4) PUMP ROOM SUMP LEVEL on Data Sheet 3.

5.4.3 MONITOR Checklist 1 equipment during jet-out activity AND CONFIRM readings stay within normal operating parameters.

5.4.4 START Pump Room Sump Jet as follows:

5.4.4.1 SET JGV-SUMP (G12/10, F7/1) SUMP TRANSFER JG-VALVE to ON.

5.4.5 MONITOR leak detection AND RECORD on Data Sheet 5.

5.4.6 MONITOR WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR or WFI-SUMP1 Current Trend display (Current Trend #9) for decreasing Sump level.

5.4.7 IF WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR does not decrease after 5 minutes, PERFORM the following actions:

5.4.7.1 SET JGV-SUMP (G12/10, F7/1) SUMP TRANSFER JG-VALVE to OFF.

5.4.7.2 NOTIFY Shift Manager of failed jetting.
5.4 **Triple Rinse Pump Room Sump using Cell Sprays** (Cont.)

NOTE - 241-AW-102 Tank High Pressure Alarm occurs at -0.50 in. W.G.

- When WFI-SUMP1 decreases below 20 in., Sump overflow lines will lose their loop seals and air will be pulled from Pump Room to 241-AW-102 by 241-AW Farm K1 Exhausters. When this occurs, a High Tank Pressure Alarm may occur; however, tank pressure is not expected to go positive.

5.4.8 **MONITOR** 241-AW-102 pressure on PDI-220 (G301, F0/12) AW-102 FEED TANK PRESSURE during sump jetting, **OR**

**REQUEST** Tank Farm Operator monitor 241-AW-102 AW tank pressure on TFMCS HMI or 241-AW-102 pressure on PR-102-1 during Sump jetting.

NOTE - When jetting is stopped, the MCS program will automatically perform an air blowdown of the sump jet as part of the shutdown process.

5.4.9 **WHEN** WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR reads less than 4 in **OR**

**WHEN** WFI-SUMP1 Current Trend display (Current Trend #9) has leveled off, **PERFORM** the following actions:

5.4.9.1 **WAIT** approximately 1 minute.

5.4.9.2 **SET** JGV-SUMP (G12/10, F7/1) SUMP TRANSFER JG-VALVE to OFF.

5.4.10 **RECORD** WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR and LI-SUMP1 (G12, F7/4) PUMP ROOM SUMP LEVEL on Data Sheet 3 as level at end of each jet.

5.4.11 **IF** performing initial transfer (jet out) of waste with TO-230-226 controls, **(SAC 5.8.1)** **NOTIFY** Central Shift Manager of total volume transferred

5.4.11.1 **OBTAIN** Central Shift Manager permission to proceed.
5.4 Triple Rinse Pump Room Sump using Cell Sprays (Cont.)

5.4.12 Backside Operator **START** Pump Room water sprays as follows:

5.4.12.1 **OPEN** valves A-34 and A-35, located in AMU Room.

5.4.12.2 **CONFIRM** spray operation by visual observation through AMU Room viewing windows.

5.4.12.3 **IF** Pump room water sprays do not appear to be operating, **CLOSE** valves A-34 and A-35.

5.4.12.4 **NOTIFY** 242-A Shift Manager.

5.4.13 **MONITOR** WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR while Pump Room spray-down is in progress.

5.4.14 **AFTER** WFI-SUMP-1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR reaches 40 to 44 inches or a level specified by 242-A Shift Manager/process memo, **CLOSE** valves A-34 and A-35 in AMU Room.

5.4.15 **AFTER** valves A-34 and A-35 are closed, **RECORD** pump room sump level from WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR and LI-SUMP1 (G12, F7/4) PUMP ROOM SUMP LEVEL on Data Sheet 3 as first fill.

NOTE Steps 5.4.3 through 5.4.15 can be repeated to complete triple rinse evolution.

5.4.16 **IF** 242-A Shift Manager requests steam supply to Pump Room Sump be isolated, **CLOSE** valve 5-46.

5.4.17 **OBTAIN** 242-A Shift Manager authorization to install administrative lock on valve 5-46.

5.4.18 **INSTALL** administrative lock on valve 5-46 in accordance with Administrative Lock Program from TFC-OPS-OPER-C-22.

5.4.19 **IF** transferring TSR waste, **NOTIFY** Central Shift Manager of Date and Time Administrative Lock was installed.

5.4.20 **RECORD** final readings on Data Sheet 2.

5.4.21 **IF** 242-A Shift Manager requests, **SHUT DOWN** 90 lb. steam to steam jets per TO-600-056.
5.5 Records

5.5.1 PERFORM the following for records identified within this procedure.

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

OR

5.5.1.2 SUBMIT the package to the central shift office.

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<th>Number of times completed</th>
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<td>Step 4.3.5.1</td>
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<tr>
<td>5.1 Prepare 241-AW Tank Farm to Receive Transfer</td>
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<td>Step 5.1.2</td>
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<td>5.2 Prepare to Rinse and Jet Pump Room Sump</td>
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<td>5.3 Add Water and Jet-Out Pump Room Sump to 241-AW-102</td>
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<td>Step 5.3.11</td>
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<td>5.4 Triple Rinse Pump Room Sump using Cell Sprays</td>
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<tr>
<td>Data Sheet 5</td>
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<tr>
<td>FWS/OE/Shift Manager SEND the completed records to the Central Shift Office for records retention.</td>
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<td></td>
</tr>
</tbody>
</table>

________________________ / _____________________ / __________
Signature                       Print (First and Last)               Date
FWS/OE/Shift Manager
5.5 Records (Cont.)

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.
Checklist 1 – Equipment Verification

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<th>242-A Shift Manager Verify equipment is operable¹</th>
<th>Signature / Print (First &amp; Last) / Date</th>
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</tr>
<tr>
<td>Annulus Leak Detection (3 ENRAFs)</td>
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</tr>
</tbody>
</table>

¹ Operable is defined as equipment being in-service within normal or expected operating range.
² Per Environmental, alternative level device may be used.

Comments:

---

Pit Drain Seal Assemblies Checklist

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<th>Position</th>
<th>Date</th>
<th>Time</th>
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</thead>
<tbody>
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</table>

Signature / Print (First & Last) / Date

Operator

---

Pit Leak Detection Checklist

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<th>PMID</th>
<th>Calibration* Functional Test</th>
<th>Operable*</th>
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</thead>
<tbody>
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<td>ET-107793</td>
<td>Completed Initial</td>
<td>Y / N</td>
</tr>
</tbody>
</table>

* Calibrated and operability definition in Section 2.2.

Signature / Print (First & Last) / Date

Shift Manager
## Checklist 2 - Pump Room Sump System Valve Check Sheet

<table>
<thead>
<tr>
<th>CHECK</th>
<th>VALVE</th>
<th>POSITION</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-12</td>
<td>OPEN</td>
<td>RW to Lines RW-620-M5 and RW-612-M5</td>
<td></td>
</tr>
<tr>
<td>3-14</td>
<td>CLOSE</td>
<td>HV-SUMP-1 Bypass</td>
<td></td>
</tr>
<tr>
<td>3-15</td>
<td>OPEN</td>
<td>HV-SUMP-1 Isolation</td>
<td></td>
</tr>
<tr>
<td>3-16</td>
<td>OPEN</td>
<td>HV-SUMP-1 Isolation</td>
<td></td>
</tr>
<tr>
<td>4-69</td>
<td>OPEN</td>
<td>RW to Sump Well</td>
<td></td>
</tr>
<tr>
<td>4-22</td>
<td>OPEN</td>
<td>PA to HV-AIR-SUMP, PV-CA1-7, and PCV-C500-1 (up high)</td>
<td></td>
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</tbody>
</table>

Signature / Print (First & Last) / Date

Signature / Print (First & Last) / Date
## Rinse and Jet 242-A Pump Room Sump

### Data Sheet 1 - Information Record Sheet

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<thead>
<tr>
<th>Date/Time</th>
<th>Record information as applicable.</th>
<th>Sheet</th>
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</tbody>
</table>

Signature / Print (First & Last) / Date

Shift Manager Review
## Data Sheet 2 - Facility Status

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>UNITS</th>
<th>Initial READING</th>
<th>Final Reading</th>
<th>OPS INITIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFI-SUMP1 (G12, F7/2) PUMP RM SUMP CORRECTD WT FACTR</td>
<td>Inches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank 241-AW-102 Level</td>
<td>Inches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDIT-K1-304/PDSL-K1-304 or PDIC-K1-304, Pump Room Pressure</td>
<td>In WG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR-102-1 (Red Trace) or TFMCS HMI or PDI-220</td>
<td>In WG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>241-AW-102 pressure is less than Pump Room atmospheric pressure.</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

_________________________ / _____________________ / __________
Signature
Operator

_________________________ / _____________________ / __________
Signature
Shift Manager Review

Print (First & Last)  Date
### Rinse and Jet 242-A Pump Room Sump

#### Data Sheet 3 – Triple Rinse Pump Room Sump

Sheet 1 of 2

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>UNITS</th>
<th>*READING</th>
<th>OPS INITIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFI-SUMP1 (G12, F7/2) Initial Level</td>
<td>Inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFI-SUMP1 (G12, F7/2) Level at end of first jet</td>
<td>Inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFI-SUMP1 (G12, F7/2) First Fill</td>
<td>Inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFI-SUMP1 (G12, F7/2) Level at end of second jet</td>
<td>Inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFI-SUMP1 (G12, F7/2) Second Fill</td>
<td>Inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFI-SUMP1 (G12, F7/2) Level at end of third jet</td>
<td>Inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFI-SUMP1 (G12, F7/2) Third Fill</td>
<td>Inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFI-SUMP1 (G12, F7/2) Level at end of fourth jet</td>
<td>Inches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WFI-SUMP1 (G12, F7/2) Final (As-left) Fill</td>
<td>Inches</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Equivalent “gallon” values for each reading on this page are recorded on page 2 of this Data Sheet.

*(Continued on Next Page)*
<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>UNITS</th>
<th>READING</th>
<th>OPS INITIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LI-SUMP1 (G12, F7/4) Initial Level</td>
<td>Gallons</td>
<td>A =</td>
<td></td>
</tr>
<tr>
<td>LI-SUMP1 (G12, F7/4) Level at end of first jet</td>
<td>Gallons</td>
<td>B =</td>
<td></td>
</tr>
<tr>
<td>LI-SUMP1 (G12, F7/4) First Fill</td>
<td>Gallons</td>
<td>C =</td>
<td></td>
</tr>
<tr>
<td>LI-SUMP1 (G12, F7/4) Level at end of second jet</td>
<td>Gallons</td>
<td>D =</td>
<td></td>
</tr>
<tr>
<td>LI-SUMP1 (G12, F7/4) Second Fill</td>
<td>Gallons</td>
<td>E =</td>
<td></td>
</tr>
<tr>
<td>LI-SUMP1 (G12, F7/4) Level at end of third jet</td>
<td>Gallons</td>
<td>F =</td>
<td></td>
</tr>
<tr>
<td>LI-SUMP1 (G12, F7/4) Third Fill</td>
<td>Gallons</td>
<td>G =</td>
<td></td>
</tr>
<tr>
<td>LI-SUMP1 (G12, F7/4) Level at end of fourth jet</td>
<td>Gallons</td>
<td>H =</td>
<td></td>
</tr>
<tr>
<td>LI-SUMP1 (G12, F7/4) Final (As-left) Fill</td>
<td>Gallons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total gallons of water added as rinse</td>
<td>Gallons</td>
<td>I =</td>
<td></td>
</tr>
<tr>
<td>(A – B) + (C – D) + (E – F) + (G – H)</td>
<td></td>
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</tbody>
</table>

_________________________ / __________________________ / __________
Signature                 Print (First & Last)         Date
Operator

_________________________ / __________________________ / __________
Signature                 Print (First & Last)         Date
Shift Manager Review
Data Sheet 4 - Alternate Leak Detection Monitoring

This data sheet is required if 241-AW-02D leak detector is inoperable. To ensure that any tank waste leak into pit/structure is identified, a camera will be required and pointed at the pit/structure drain to detect leaks into the pit/structure.

Camera observations shall be monitored in order to detect a tank waste leak in the associated secondary containment pit/structure within 24 hours and prevent overflow from the secondary containment pits/structures to the environment. (RPP-16922)

| DATE: | | | | | | | | |
|------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| SHIFT: | D | N | D | N | D | N | D | N |
| Camera operational\(^1\) (✓) | | | | | | | | |
| No leak in Pit/Structure\(^2\) (✓) | | | | | | | | |

**Operator Print (First & Last):**

Operator Signature:

Date:

**Shift Manager Print (First & Last):**

Shift Manager Signature:

Date:

Signature / Print (First & Last) / Date

242-A Shift Manager

**Normal Operating Surveillance:** No evidence of tank waste liquid around the drain of applicable pit/structure per camera monitor. (✓) indicates no tank waste leakage was observed during the monitoring period.

1. **IF** camera fails or becomes inoperable, (i.e. cannot perform intended function), **IMMEDIATELY NOTIFY** 242-A Shift Manager and attempt to regain camera operation. **IF** unable to regain operation in a timely manner (≤ 60 minutes), **REQUEST** 242-A A1 Operator to shutdown transfer.
2. **IF** leak is observed in 2421-AW-02D, **IMMEDIATELY NOTIFY** 242-A Operator to stop jetting sump.

**Reporting Requirement:** NOTIFY Environmental On Call per TFC-ESHQ-ENV_FS-C-01.

**COMMENTS:**

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<table>
<thead>
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<th>Type</th>
<th>Document No.</th>
<th>Rev/Mod</th>
<th>Release Date</th>
<th>Page</th>
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<td>TO-650-095</td>
<td>B-2</td>
<td>04/09/2018</td>
<td>29 of 30</td>
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## Data Sheet 5 - Leak Detection Monitoring

### 241-AW-02D

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<tr>
<th>DATE:</th>
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<td>AW02D-LD-1971</td>
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Signature / Print (First & Last) / Date

### Normal Operating Surveillance:

- (√) indicates no leak detector alarm was observed during monitoring period.
- **1. IF leak detector alarms, IMMEDIATELY NOTIFY 242-A Operator to stop jetting sump.**

### Reporting Requirement:

- NOTIFY Environmental On Call per TFC-ESHQ-ENV_FS-C-01

### COMMENTS:

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**Type**: CONTINUOUS  
**Document No.**: TO-650-095  
**Rev/Mod**: B-2  
**Release Date**: 04/09/2018  
**Page**: 30 of 30