Changes “Other Than Inconsequential” Require These Additional Reviews:

Radiological Controls
Lee Livesey’s Organization

USQ # EV-17-1742-S, Rev. 2

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<tr>
<th>Rev-Mod</th>
<th>Release Date</th>
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<tr>
<td>P-5</td>
<td>06/14/2018</td>
<td>Changes as a result of a Periodic Review</td>
<td>Corrected initiating condition and clarified steps in the procedure.</td>
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<td>P-4</td>
<td>12/12/2017</td>
<td>Inconsequential Change</td>
<td>Modified note at beginning of procedure</td>
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<td>P-3</td>
<td>12/04/2017</td>
<td>Operations Request</td>
<td>Added Step 2.1.2 to address recording step completion. Changed RECORD section to generate no records.</td>
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<td>P-2</td>
<td>08/23/2017</td>
<td>Operations Request</td>
<td>Modified/struck out steps referencing startup, shut down and/or use of Diesel generator.</td>
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<td>P-1</td>
<td>09/14/2016</td>
<td>Clarified note</td>
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NOTE - This procedure is not intended to be used as a standalone procedure. It is a guide for the 242-A Shift Manager (SM) to ensure appropriate actions are performed in the event of an emergency and is designed to augment applicable DOE-0223 “Emergency Plan Implementing Procedures.”

- This is a guide to assist the operator and Shift Manager in placing the facility in a safe configuration.
- Steps in this procedure may be performed simultaneously or in any logical order, depending on situational needs.
- The attached Duty Card is to be completed by the A-1 operator. The Shift Manager has the responsibility to follow and complete all procedural steps. Not all procedural step are included in the duty card.
- Any change to the body of this procedure requires review of Attachment 1 to determine whether changes to Attachment 1 are also required.
- This ERP implements actions allowed by AC 5.10.2 “Emergency Response Actions Following Facility Fires.”
- This procedures is not designed for, nor intended to be applied to, "expected" alarms generated by approved work activities or procedures.

1.0 INITIATING CONDITIONS

- A confirmed fire identified by smoke or flame
- Fire alarm is activated.
2.0 ACTIONS

2.1 Initial Actions

2.1.1 ENSURE fire alarm is activated.

2.1.2 ENSURE control room operator is performing Attachment 1.

2.1.2.1 WRITE the time of step completion on the laminated Duty Card.

2.1.2.2 RECORD time of step completion in the A-1 or Shift Manager logbook.

2.1.3 OBTAIN 2-way radios and Staging area equipment bag.

2.1.4 IF CA1 Vessel contains waste, PERFORM the following steps:

2.1.4.1 PRESS any Seismic Shutdown button. (AC 5.10.2)

2.1.5 EVACUATE 242-A Evaporator per TF-ERP-001.

2.1.5.1 ENSURE personnel accountability is completed and (if any) the status of injured personnel is known.

2.1.5.2 DIRECT workers in radiological PPE to report to radiological PPE staging and standby for HPT survey.

2.1.6 NOTIFY Hanford Fire Department of facility fire by calling 911 or 3730911 from a cell phone AND PROVIDE all information available.

NOTE - DST 241-AW-102 level reading should indicate an increase.

2.1.7 IF CA1 Vessel contains waste, PERFORM the following steps: (AC 5.10.2)

2.1.7.1 CONTACT TMACS operator or field operator, AND REQUEST the following:

- DST 241-AW-102 level reading
- Slurry Receiving Tank level reading.

2.1.7.2 REQUEST TMACS operator or field operator monitor the following parameters:

- DST 241-AW-102 level reading
- Slurry Receiving Tank level reading.
2.1 Initial Actions (Cont.)

2.1.7.3 **SECURE** raw water by CLOSING valve 117-R.

2.1.7.4 **IF** a waste level increase of > 7 inches in DST 241-AW-102 cannot be verified in 30 minutes, **SHUT DOWN** air compressors CP-E-1 and CP-E-2 by securing electrical power to the facility:

    a. **POSITION** substation main feed breaker (F8X193) to **TRIP**.
    
    b. **IF** hazards prevent tripping of F8X193, **CONTACT** Electrical Utilities (373-2321) to immediately isolate power to 242-A.

**NOTE** - Once valve 117-R is closed, level in slurry tank should stop rising within 30 min.

2.1.7.5 **IF** after 30 minutes tank level in Slurry Receiving Tank continues to rise, **ISOLATE** Raw Water to Facility either inside 242-A-81 Raw Water Service Building or Upstream of valve 117-R.

2.1.8 **PROVIDE** the following information to BED:

- Facility status
- Personnel accountability
- Location of personnel
- Slurry line flush valves are failed open, monitor slurry tank level
- A request for HPT support for personnel surveys (if needed).
### 2.2 Follow-up Actions

2.2.1 **IF** available, **SEND** flagger, to meet Hanford Fire Department.

2.2.2 **EVALUATE** safety of location.

2.2.2.1 **IF** safer location is assessed, **RELOCATE**.

2.2.2.2 **IF** relocation occurs, **NOTIFY** BED of new location.

2.2.3 **IF** Hanford Fire Department needs electrical power isolated to facility, **TURN** substation main feed breaker (F8X193) to TRIP.

2.2.4 **NOTIFY** BED that fire suppression liquid drains to tank 241-AW-102 and it is necessary to monitor 241-AW-102 levels.

2.2.5 **IF** notified by BED that 241-AW-102 liquid level might be exceeded due to fire suppression systems, **DIRECT** HFD to isolate fire water supply by closing post indicating valve 242-A 119-R, located next to Diesel Generator.
3.0 RECOVERY

3.1 Termination/Exit Criteria

- Facility has been evacuated
- Fire is extinguished or it has been determined there was not an actual fire
- Facility is in safe configuration
- Emergency is terminated in accordance with RLEP 3.4 Event Termination, Reentry and Recovery.

NOTE - Temperature sensor TAHH-K1-410 is a melting link type sensor, if alarm TAHH-K1-410 activates the sensor will have to be replaced to place the system back in service.

3.1.1 IF TAHH-K1-410 Alarm has tripped and it is determined the facility is in safe configuration, PERFORM the following:

- 3.1.1.1 REQUEST Hanford Fire Department place fan bypass switch in BYPASS position at the Fan Bypass Box.

- 3.1.1.2 KEEP fan bypass switch in BYPASS until maintenance can remove or replace duct temperature sensor.

3.2 Reentry and Recovery

3.2.1 PERFORM assessment on condition of facility and what cleanup activity will be needed.
4.0 RECORDS

The performance of this procedure generates no records.

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.
242-A Evaporator Fire

Attachment 1 - 242-A Fire Duty Card

TIME LINE

FIRE ALARM, EVIDENCE OF FIRE, NOTIFICATION OF FIRE OR CONFIRMED EXPLOSION

Fire Alarms Activated

ACTIVATE a Control Room fire alarm pull box

YES

NO

OBTAIN ___ 2-way radios ___ Staging area equipment bag

CAI Vessel contains waste

YES

PRESS Any Seismic Shutdown button (AC 5.10.2)

NO

EVACUATE to the Facility Staging Area

DIRECT workers in Radiological PPE to report to Radiological PPE staging and standby for HPT survey

PHONE 911 or 373-0911 – Cell Phone

PROVIDE the following information to BEO:
- Facility status
- Personnel accountability
- Location of personnel
- Slurry line flush valves are failed open, monitor slurry tank level
- A request for HPT support for personnel Surveys

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NOTE
Closure of 242-A 119R (fire sprinkler system isolation valve) is the responsibility of the Hanford Fire Department. (If available)

TIME LINE

SEND flagger to meet Hanford Fire Department

CO-LOCATE with Hanford Fire Department

IF Hanford FD needs electrical Power Isolated to facility

DISABLE substation main feed breaker (F8X193) to TRIP.

NOTIFY BED that fire suppression drains to Tank 241-AW-102 and it is necessary to monitor 241-AW-102 and 242-A Slurry Tank levels and potential for sending waste/water to these tanks

NOTIFY Shift Manager of actions and status, AND FOLLOW directions.

IF Seismic Shutdown button DEPRESSED, SECURE raw water by CLOSING valve 117-R

BED indicates excessive water addition.

ISOLATE appropriate water lines by closing post indication valve 242-A 119R.

PROCEED to Recovery Actions in TF-ERP-EVAP-006.