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1.0 PURPOSE AND SCOPE  
(7.1.1, 7.1.4, 7.1.5, 7.1.6, 7.1.7, 7.1.9, 7.1.10, 7.1.11)


This procedure applies to WRPS personnel and subcontractors performing work on the Hanford Site and all other applicable facilities and personnel controlled by WRPS for the purpose of implementing this procedure.

The emergency management process includes the following:

- Performing emergency planning hazard surveys and emergency planning hazard assessments
- Developing Emergency Action Levels (EALs)
- Preparing Building Emergency Plans (BEPs)
- Contingency plan requirements
- Conducting technical review of Emergency Response Procedures (ERPs)
- Identifying site level, facility Emergency Response Organization (ERO), and building emergency organization
- Establishing training and drill requirements
- Assessing condition of emergency equipment
- Program administration.

Changes to EM documentation included within the Hanford Site Permit governing WAC 173-303 activities (Hanford Facility RCRA Permit) must be coordinated through WRPS Environmental Compliance in conjunction with the WRPS EM component of the Security and Emergency Services (SES) organization.

2.0 IMPLEMENTATION

This procedure is effective on the date shown in the header.
3.0 RESPONSIBILITIES

Security and Emergency Services (SES) is responsible for the following:

1. Provide oversight and administer WRPS contractor/facility level EM program.

2. Assist the Hanford Site Emergency Preparedness Program in development and maintenance of the DOE hierarchy documents and applicable implementing procedures.

3. Assist in development of the Hanford Emergency Readiness Assurance Plan (ERAP) and annual updates, training and exercises, and coordination of assessment activities. Develop related documentation and coordinate emergency resources.

4. Ensure compliance with DOE O 151.1C, DOE/RL 94-02, and DOE-0223 (or any other applicable requirements). Ensure requirements are carried out as they apply to the program, and update applicable training, plans, and/or procedures, as necessary, to reflect hierarchy document requirements.

5. Ensure that information or documentation prepared in compliance with DOE orders, directives, procedures, and/or related to site exercises (e.g., corrective actions) is provided to the DOE Office of River Protection (ORP) and/or DOE Richland Operations Office (RL).

6. Conduct program self-assessments and management and specialty assessments in compliance with the organization annual management assessment plan. Assist ORP in assessment documentation and preparation of emergency management program assessments at least once every three years. (7.1.7)

7. Use a document control system to ensure that controlled copies of applicable material are up to date and available at locations where they may be needed during an emergency. Determine internal and external controlled copy distribution of applicable emergency plans and respective implementing procedures. Perform a monthly surveillance of all procedures found in the Incident Command Post (ICP) check-listed position(s) binders to ensure they are current.

8. Maintain copies of documents and records that support the EM program (i.e., technical data, Hazards Assessments, ERAPs, and plans and procedures). Records of training, drills, and exercises shall be maintained to document status of the program and provide direction for improvement.

9. The Emergency Preparedness Organization Representative ensures that applicable Emergency Preparedness Vital Records, regardless of media, are established and identified by:
   - Completing and approving a Vital Records Justification (VRJ) form (RL-F-243.2.1)
   - Submitting the form to the Company Records Specialist, for processing into the Integrated Document Management System (IDMS)
• Submitting identified Vital Records to a release station for issuance and distribution. The Hanford Emergency Operations Center (EOC) and alternate EOC must be on the Release Station distribution list.

• Documenting the verification of the Vital Records in the Hanford EOC on an annual basis. This verification includes the determination of necessary additions or deletions pertaining to Vital Records. The documentation and any changes are to be provided to the Company Records Specialist and Document release station distribution lists updated.

10. Vital Records in the EOC are available on a hard drive and can be downloaded if required (DOE 0243.2, “Vital Records”).

11. An EM representative shall approve all VRJ Forms for WRPS.

12. Participate in investigations or emergency response evaluations when an event has occurred that resulted in DOE emergency classification.

Additional responsibilities are contained within Section 4.0.

4.0 PROCEDURE

All process steps in this section may be performed in sequence or in parallel.

4.1 Program Administration

4.2 Emergency Management Self-Assessment

Emergency Management

1. Conduct an annual self-assessment of emergency management program in accordance with TFC-ESHQ-AP-C-01, DOE/RL 94-02, and DOE-0223 Section 3.29. (7.1.4)

2. For DOE emergency management assessments, develop corrective action plans within 30 working days of receipt of a final evaluation report, as required by DOE/RL-94-02.

3. Base self-assessment program on the criteria identified in DOE G 151.1-3, Appendix D.

NOTE: The criteria for all applicable program elements must be addressed through the assessment process over a five year period.

For example, when assessing the Technical Planning program element, you may choose to only include the criteria for Emergency Planning Hazards Assessment one year. In a subsequent year you may choose to include only the Hazards Survey criteria under the same program element. This method is acceptable as long as all criteria for all applicable program elements are assessed every five years.

4. Annually assess applicable program elements in, DOE G 151.1-3, Appendix D.
5. Review the following 9 program elements:
   • Technical Planning
   • Program Administration
   • Training and Drills
   • Readiness Assurance
   • Emergency Response Organizations
   • Emergency Facilities and Equipment
   • Categorization and classification
   • Notification and Communication
   • Protective Action & Reentry.

6. Document self-assessment issues as either Suggestions or Findings, in accordance RLEP 3.29. Issues identified as Findings will require verification and validation of corrective actions by an organization that is independent of those performing the corrective action.

7. Document self-assessment results in the ERAP, maintained and updated annually by DOE-RL.


9. Ensure corrective actions for issues involving training or procedures identified during the self-assessment and exercises are completed prior to the next evaluation (self-assessment or exercises). (7.1.5)

4.3 Development, Maintenance, Revision, and Issuance of Emergency Planning Hazards Survey

(7.1.11)

The Emergency Planning Hazards Survey (qualitative examination) is used for emergency planning purposes. DOE O 151.1C requires that EM efforts begin with the identification of hazards and that the scope and extent of emergency planning and preparedness be commensurate with the hazards. Information collected will be used to ensure facilities requiring a hazards assessment receive one. The Hazards Survey shall describe the potential impacts of emergency events or conditions and summarize planning and preparedness requirements. The survey shall also include a baseline for the operational emergency base program as required by DOE/RL 94-02, Section 1.3.3.1.

Emergency Management/ Nuclear Safety

1. Evaluate the Hazards Survey process to assess compliance with identifying conditions to be addressed by the comprehensive Emergency Management program in accordance with DOE-0223, RLEP 3.27 “Hazards Surveys.”

   NOTE: Each Hazards Survey shall combine as many facilities as possible that are subject to the same types of hazards.

2. Prepare and issue a Hazards Survey for input into the identified EPHA.
3. Update the Hazards Survey whenever hazardous material changes warrant a change, operations warrant a change, additional or new facilities are acquired or operated by WRPS, or at a minimum, every three years in accordance with DOE/RL-94-02, Section 1.3.3.

NOTE: Examples of changes that may impact the analysis are hazardous material inventory changes, facility modifications, and changes in operating status.

WRPS Operations Divisions/Environmental Compliance

4. Provide information to EM and Nuclear Safety on any changes or conditions that impact the analysis in the Hazards Survey.

5. Assist in the development of the Hazards Survey revision process.

NOTE: Changes may also affect the facility BEPs/contingency plans (see Section 4.5 and 4.6 for further instructions).

Environmental Compliance

6. Ensure that a review of RCRA documentation is completed against changes to the Hazards Survey.

   a. Ensure revision to RCRA documentation is initiated if a change to the Hazards Survey impacts RCRA documentation.

NOTE: A signature cover page should be maintained with the hazards survey for the purpose of approval verification and documentation.

Emergency Management/Nuclear Safety/WRPS Operations Divisions

7. Obtain technical review and signature approval of the Hazards Survey by the following organizations:

   • Production Operations
   • 222-S Laboratory, Production Operations
   • Nuclear Safety
   • Security and Emergency Services.

Emergency Management

8. Submit to DOE-RL and DOE-ORP in accordance with DOE-0223, RLEP 3.27, for approval.

9. Upon approval, ensure the Hazards Survey is issued as Official Use Only (OUO). (7.1.8)

10. Maintain the Hazard Survey records of revisions (e.g., IDMS, OUO files).

11. Ensure any changes are provided to affected organization(s) through documented means (e.g., Required Reading).
4.4 Development, Maintenance, Revision, Issuance and Retirement of Emergency Planning Hazard Assessments

(7.1.11)

The emergency planning hazard assessment (EPHA) provides the framework for emergency response planning to virtually any hazardous material operational emergencies (Alert and Site Area) using documented methods, models, and evaluation techniques (see DOE/RL 94-02, Section 1.3.3.2, and DOE-0223, RLEP 3.22).

NOTE: Hazardous facilities are facilities that can create a hazardous material operational emergency (Alert or Site Area).

1. Complete an EPHA (quantitative examination) for all identified hazardous facilities to form the basis for emergency planning for the facility as delineated in DOE-0223, RLEP 3.22.

NOTE: Software used to perform calculations must be used in accordance with an approved Software Management Plan (SMP).

2. Ensure that each Hazards Assessment includes the identification and characterization of hazardous materials (chemical, radiological, and non-radiological) specific to a facility or activity, analyses of potential accidents or events, and evaluation of potential consequences.

NOTE: Additional information/guidance to assist in development of a Hazards Assessment is delineated in DOE-0223, RLEP 3.22, and applicable sections of DOE 151.1C.

3. Ensure that each Hazards Assessment includes a determination of the size of the Emergency Planning Zone.

NOTE 1: The Hazards Assessment shall be updated to delineate significant changes to the facility or hazardous material inventories and be maintained in accordance with site contractor document control requirements.

NOTE 2: Changes that result in a reduction of hazards with no adverse effect on safety or emergency preparedness or response may be included in the next scheduled review and update as delineated in DOE O 151.1C.

4. Review each Hazards Assessment at least once every three years or as revised as delineated in DOE-0223, RLEP 3.22, to determine the need for changes, revisions, temporary revisions, EPHA retirement, or situations that may impact analysis in the Hazards Assessment.

NOTE 1: Examples of changes that may impact the analysis are hazardous material inventory changes, facility modifications, and changes in operating status. (See TFC-ENG-SB-C-01.) (7.1.3, 7.1.8)
NOTE 2: EM will serve on the Safety Basis Review Board for DSA change proposals to ensure impacts to the Hazards Assessment are reviewed and revision occurs as required.

5. If a proposed Documented Safety Analysis (DSA) change impacts the analysis in a Hazards Assessment, revise the appropriate Hazards Assessment (Tank Farms, 242-A Evaporator or 222-S Laboratory) as appropriate.

NOTE: Changes may also affect the facility BEPs/contingency plans (see Section 4.5 and 4.6 for further instructions).

6. Ensure review of RCRA documentation is completed against changes to the Hazards Assessment. Ensure revision to RCRA documentation is initiated if a change to the Hazards Assessment impacts RCRA documentation.

NOTE: Examples of conditions that may impact the analysis are positive un-reviewed safety questions or new release scenarios discovered during a process hazards analysis.

7. If a condition that impacts the analysis in a Hazards Assessment is discovered, revise the facility Hazards Assessments on discovery.

8. Provide information to EM on any changes or conditions (e.g. fire hazard analysis or vulnerability assessments) that impact the analysis in the Hazards Assessment and assist in development of Hazards Assessment revision process.

NOTE: A signature cover page should be maintained with the Hazards Assessment for the purpose of approval verification and documentation.

9. Obtain technical review and signature approval of the hazards assessment by the following organizations:
   - Production Operations
   - Nuclear Safety
   - ESH&Q
   - Security and Emergency Services.

10. Submit the Hazards Assessment to DOE-ORP and DOE-RL in accordance with DOE-0223, RLEP 3.22, for approval; upon approval, ensure the Hazards Assessment is issued as Official Use Only (OUO). (7.1.8)

11. Maintain the documented review/approval in program file.

12. Maintain a current copy of hazard assessment (s) on the Security and Emergency Services website.
13. Provide a copy of the Hazards Assessment(s) to the Hanford Emergency Operations Center (EOC) staff for use in the Unified Dose Assessment Center and in accordance with Vital Records requirements.

14. Ensure changes are provided and/or affected organizations are trained through documented means (e.g., required reading).

### 4.5 Development, Maintenance, Revision, and Issuance of Emergency Action Levels

**NOTE 1:** EALs are specific, predetermined, observable criteria used to detect, recognize, and determine the classification of Hazardous Material Operational Emergencies. The EALs are typically identified as either event-based or symptom-based. Facility-specific EALs (and non-facility specific), shall be developed for the spectrum of potential Hazardous Material Operational Emergencies identified by the Hazards Assessment (see DOE/RL-94-02, Section 4.4).

**NOTE 2:** Additional guidance for developing EALs is in DOE O 151.1C regarding EALs and event classification.

<table>
<thead>
<tr>
<th>Emergency Management/Nuclear Safety/Affected Organizations</th>
<th>1. Develop, revise, and maintain EALs for each applicable facility with a Hazards Assessment, in accordance with DOE/RL-94-02; DOE-0223, RLEP 3.21, Emergency Action Levels.</th>
</tr>
</thead>
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<tr>
<td>WRPS Operations Divisions/Nuclear Safety/Radiological Controls/Emergency Management</td>
<td>2. Provide input, and review, of EALs as developed.</td>
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<tr>
<td></td>
<td>• Manager, Production Operations Shift Office</td>
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<td>• Manager, Radiological Controls</td>
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<td>• Manager, Nuclear Safety</td>
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<td>• Manager, SST Retrievals.</td>
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<tr>
<td>Emergency Management/Environmental Compliance</td>
<td>3. If EAL changes affect RCRA documentation (e.g., facility Building Emergency Plans/contingency plans), complete a review for affected changes and revise as necessary (see Section 4.5 and 4.6 for further instructions).</td>
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<tr>
<td>Emergency Management/Affected Organizations</td>
<td>4. Ensure concurrence and signature approval of EALs is provided by the appropriate organizations via the workflow system:</td>
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<tr>
<td></td>
<td>• Production Operations</td>
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<td></td>
<td>• Nuclear Safety</td>
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<td></td>
<td>• ESH&amp;Q</td>
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<td></td>
<td>• Security and Emergency Services.</td>
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<tr>
<td>Emergency Management</td>
<td>5. Submit for external review and approval in accordance with DOE-0223, RLEP 3.21.</td>
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<tr>
<td>Emergency Management/Affected Organizations</td>
<td>6. Ensure applicable affected organizations are trained on all EAL changes prior to issuance, and changes are provided and/or affected organizations are trained through documented means (e.g., required reading).</td>
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7. Inform external organization(s) to complete external issue process.

8. Ensure the EALs are issued as OUO.

Emergency Management/Affected Organizations

9. Maintain EALs in the Building Emergency Director’s field books.

Emergency Management

10. Provide input into the annual ERO training refresher.


4.6 Development, Maintenance, Revision, and Issuance of Building Emergency Plans
(7.1.11)

NOTE 1: When used in conjunction with DOE/RL-94-02, this plan meets the requirements for contingency planning as required by WAC 173-303-330, WAC 173-303-340, WAC 173-303-350, WAC 173-303-360 requirements, and implements as appropriate, site-wide Permit conditions II.A, II.B, and II.C.

NOTE 2: When issued, a BEP shall demonstrate compliance with emergency preparedness planning requirements at hazardous facilities and specifically discusses contingency plan development and preparedness requirements applicable to hazardous facilities.

Emergency Management/Applicable Facility Operations Representative

1. Ensure a BEP draft is prepared as required in DOE/RL-94-02, Section 1.2 and Figure 1-1, and RCRA contingency planning requirements for each applicable facility with a Hazards Assessment.

2. Submit the draft BEP to the following organizations for review and comment:

- WRPS Operations Divisions (e.g., SST Retrievals/Production Operations/222-S Laboratory/Tank Farm Projects) when applicable.
- Environmental Compliance Officer (or designee)
- Other applicable organizations.

NOTE 1: Certain sections of the BEP are enforceable sections meeting RCRA contingency planning requirements. Enforceable sections cannot be changed without coordinating the change with the Hanford Facility RCRA Permit modification process*.

NOTE 2: If enforceable sections require revision, the RCRA Permit modification process may require between one to six months for revision depending on the nature of the revision request.

*Changes shall be coordinated through the Environmental Compliance designated authority.
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<tr>
<td>3.</td>
<td>Review the BEP.</td>
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<td>4.</td>
<td>If applicable, provide comments on the BEP.</td>
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<td>5.</td>
<td>Finalize review and provide signature approval, if appropriate, for the BEP.</td>
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<td>6.</td>
<td>If facility changes are known to affect the BEP, immediately update the plan if:</td>
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<td>• The applicable regulations or the Hanford Facility RCRA Permit are revised</td>
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<td>• The Hanford Site Emergency Management Plan or the BEP fails in an emergency</td>
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<td>• Facility conditions change in a way that materially increases the potential for fires, explosions, or releases of dangerous waste or dangerous waste constituents, or in a way that changes the response necessary in an emergency</td>
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<td>• The list of emergency equipment changes. (7.1.8)</td>
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<td>7.</td>
<td>Conduct in accordance with the following frequency requirements a documented review of the BEP to identify any required changes:</td>
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<td>• As required by WAC 173-303-350(5), when applicable</td>
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<td>• At least once every twelve months or as provided in the latest revision of DOE/RL-94-02, Section 14.3.1.</td>
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<td>8.</td>
<td>Maintain documented review in the program file and when required, submit a letter of review/revision to the appropriate internal/external organizations.</td>
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<td>9.</td>
<td>Maintain the following documents (for contingency plan application) at locations identified in Section 12.0 of the BEP:</td>
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<td>• Authorized official copies of applicable BEP</td>
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<td>• Copy of DOE/RL-94-02.</td>
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<tr>
<td>10.</td>
<td>Ensure changes are provided and/or affected organizations are trained through documented means (e.g., required reading).</td>
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4.7 Contingency Plan Requirements

WAC 173-303 requires any facility that manages dangerous waste either as permitted or non-permitted (i.e., less than 90-day storage) activity to have a contingency plan (WAC 173-303-350). A Dangerous Waste Part B Application must be submitted for those Treatment, Storage, and Disposal (TSD) facilities seeking a final status permit. Chapter 7 of the Part B Application includes the contingency plan, which specifies through an applicability matrix where the WAC requirements for emergency response are being satisfied; either through the TSD BEP, DOE/RL-94-02, or other sections of the application (e.g., Chapter 6.0, Procedures to Prevent Hazards). Once a TSD unit is incorporated into the Hanford Facility (site wide) RCRA Permit, WA-7890008967, additional unit-specific conditions for emergency management may apply. For any TSD unit incorporated into the Site-wide permit, conditions II.A, II.B, and II.C must be complied with as applicable.

The TSD units that are final status but were not incorporated into the Site-wide permit must comply with DOE/RL-94-02 and unit specific requirements. Conditions II.A, II.B, and II.C may not apply.

Interim status operating TSD units (operating units not yet incorporated into the Hanford Facility RCRA Permit), must comply with the TSD unit specific Building Emergency Plan, DOE RL-94-02, and all applicable sections of WAC 173-303.

Emergency Management
1. In accordance with Section 4.6, maintain all active BEPs and/or contingency plans as related to permit contingency plan requirements, in accordance with Section 4.6.

   NOTE: For TSD units not in final status, changes to the RCRA portions of contingency documents do not require preapproval by Ecology; however, changes of this nature shall be reviewed by Environmental Compliance to ensure compliance with the WAC.

Emergency Management/Environmental Compliance/Other Applicable Organizations
2. When changes are required for any contingency planning document and/or a new/revision of a permit or permit application, work together and/or provide for review and concurrence with one another prior to final submittal to Permitting and/or Washington State Department of Ecology (Ecology).

   3. Complete revisions in the timetable associated with Section 4.5, as applicable.

Emergency Management/Environmental Compliance/Other Applicable Organizations

   5. Submit letter of review/revision to appropriate internal/external organizations, if required.

4.8 Development, Maintenance, Revision, and Issuance of Emergency Response Procedures

Emergency response procedures complement and support the BEP and Emergency Plan implementing procedures as specified in DOE-0223.
1. Assist in development of emergency response procedures for responding to specific emergency conditions.

2. Use the following documents as a basis for determining the necessary emergency response procedures:
   - Applicable Safety Analysis Reports
   - Applicable DSA
   - Other safety basis documentation
   - Applicable Hazards Assessment
   - Applicable BEP.

   NOTE: Requests for changes to emergency response procedures shall be documented.

3. Evaluate the following sources for incorporation into emergency response procedures:
   - Changes to systems
   - Changes to processes
   - Changes to requirements
   - Lessons learned from drills, exercises, and real events
   - Feedback and requests from procedure users
   - Assessments.

4. Review procedures against the facility’s TSD unit-specific permit (if issued) and/or permit application for consistency.

5. Ensure Emergency response procedures use terminology that is consistent with DOE-0223, RLEP 1.1.

6. For procedures that directly relate to dangerous waste response, ensure the requirements meet the applicability of WAC 173-303-360 (2), “Emergency Procedures.”

7. Ensure emergency response procedures are maintained in hard copy and contained in the BED/Facility Operations Specialist’s (FOS) field book at primary and alternate ICPs.

8. Review emergency response procedures at least once every twelve months. (7.1.7)
9. If the review of an emergency response procedure indicates that a revision is necessary, revise the procedure.

10. Ensure emergency response procedure revisions are reviewed by the appropriate organizations.

11. Provide review of alarm response procedures and/or abnormal operating procedures, as requested, to ensure potential linkage to emergency response procedures.

4.9 Identification of Site Level and Facility Emergency Response Organizations (ERO)

4.9.1 Identification of Site Level ERO

1. Identify the management and technical staff required to support the Site-level ERO in accordance with the duties check-list in DOE-0223 and DOE/RL-94-02, Section 2.0.

NOTE 1: Exempt and non-exempt employees may be assigned to the DOE Hanford Emergency Operations Center (EOC). Personnel identified to staff either the facility ERO or the Site level ERO positions shall be assigned this duty as part of their job assignment.

NOTE 2: Personnel may not be assigned to the Site level ERO list until they are qualified and their training is documented.

NOTE 3: Except for unusual circumstances, personnel shall not be reassigned until a replacement is fully trained and qualified.

2. If necessary, assign additional management and technical staff to support the Site-level ERO.

3. Ensure all exempt personnel assigned to serve on the Site-level ERO satisfy the following requirements:
   - Have received required training (training requirements are maintained within the Drill Program Plan)
   - Added to the EOC Paging System
   - Are assigned to the roster for the appropriate facility or organization.

4. Provide names for staffing the Hanford EOC positions to Hanford Site EM organization.

4.9.2 Identification of Emergency Response Organization (Hazardous Facilities)

Personnel and resources at the facility level comprise initial response capability for an emergency. Facilities shall direct appropriate emergency response actions, as delineated in DOE/RL-94-02, Section 2.2.1.1, within the area of their control and at the scene of the emergency.
Tank Farm Categorization/Classification responsibility for WRPS emergencies falls upon the BED/CSM. 222-S Laboratory Categorization/Classification responsibility for WRPS emergencies falls upon the BED/Facility Operations Manager (FOM).

Personnel shall be trained for their emergency response duties and shall participate in drills and exercises, as assigned. Organizations with personnel, resources, and equipment assigned to emergency response duties shall budget for their time in training to include drills and exercises.

| WRPS Operations Divisions/Emergency Management | 1. Appoint BEDs and designated alternates, as delineated in DOE-0223, Section 2.2.1.1.3. |
| Emergency Management/WRPS Operations Divisions & 222-S Laboratory | 2. Appoint additional ERO staff positions, such as Hazards Assessors and Hazards Communicators, to fill key ERO positions. |
| | 3. Submit ERO staff names to ES for training purposes. |
| | 4. Designate the ERO members in “Washington River Protection Solutions (WRPS) 200 Area Tank Farms Emergency Response Organization” listing, or the “222-S Laboratory Complex Facility Emergency Response Organization (FERO) and Support Personnel” Listing. |

NOTE 1: ERO members will only be added or maintained on the listing following the successful completion of:

- Training requirements listed in TFC-PLN-130 (WRPS Operations)
- Annual participation in a drill/exercise with a successful proficiency evaluation as determined by the appointed drill coordinator.

NOTE 2: ERO members may be removed from the listing if:

- They fail to successfully complete a drill proficiency evaluation within their annual drill cycle.
- It is determined that due to current needs that a member of the ERO should be removed from the listing.

NOTE 3: Training extensions may be granted on a case-by-case basis with the approval of the SES Manager, if the extension is granted prior to the expiration date of their 365 day re-train window.

| 5. Maintain listing of ERO staff. |
| 6. Ensure the listing of ERO staff is documented in “WRPS 200 Area Tank Farms Emergency Response Organization” listing or the “222-S Laboratory Complex FERO and Support Personnel” listing, as appropriate. |
7. Maintain an ERO that is able to mitigate the emergency, complete required emergency management activities, and interface with the Site-level ERO.

8. Designate the ERO by name and position.

9. Provide initial and annual refresher facility-specific ERO training to designated ERO members.

10. Ensure facility-specific ERO (initial/annual refresher) training is conducted with ERO members, and includes the following:

   - An overview of the Incident Command System (ICS)
   - Overview of ERO positions
   - Facility-specific hazards (Hazards Assessment)
   - Changes to Hazards Assessments and/or Emergency Action Levels for each hazardous facility
   - Changes to the facility abnormal operating procedures and emergency response procedures
   - Lessons learned.

11. Ensure the ERO includes the following positions:

   - ICP Communicator
   - Chemical Hazards Assessors
   - Radiological Hazards Assessors
   - ICP Hazards Communicator
   - Facility Operations Specialist
   - Building Emergency Directors.

12. Review the ERO listing on a quarterly basis to ensure accuracy, and revise the “WRPS 200 Area Tank Farms Emergency Response Organization” and “222-S Laboratory FERO and Support Personnel listing” and issue accordingly.

13. If a new BED has been assigned, complete the following sub-steps:

   a. Notify EM

   b. Ensure the BED is qualified by meeting all training and drill requirements.

14. Update the “WRPS 200 Area Tank Farms Emergency Response Organization” and “222-S Laboratory FERO and Support Personnel” listings, as required by the Hanford Site Permit governing WAC 173-303 activities. (7.1.10)
WRPS Operations Divisions

15. Review and approve the ERO listings in “WRPS 200 Area Tank Farms Emergency Response Organization” and “222-S Laboratory FERO and Support Personnel” listings.

4.10 Identification of Emergency Response Organization (ERO) for General Purpose and Low Hazards Facilities

Building Management/Building Administration

1. Appoint personnel and designated alternates as required in DOE/RL-94-02, Section 2.2.1.1.1, to fill the following ERO positions:

   - Building Warden
   - Building Warden/Building Emergency Director for Low-Hazards Facilities
   - Personnel Accountability Aides
   - Staging Area Managers.

2. Submit the ERO positions to EM.

3. If a change is made to the ERO, notify ES within 30 days of the change.

Building Management/Building Administration/Emergency Management

4. Ensure that each general purpose building and low hazards facility is assigned an adequate number of ERO Personnel Accountability Aid (PAA) members. Generally, a ratio of one PAA to 20 employees in a work area/suite is sufficient for providing adequate coverage and guidance at the time of the emergency (e.g., building evacuation or take cover). (7.1.2)

5. Refer to Attachment A as a guide when determining the optimum safe staffing levels in accordance with DOE/RL 94-02 and OSHA 29 CFR 1910.38, Subpart E “Emergency Action Plan Training.”

   NOTE: Training requirements for BW/BED for Low-Hazards Facilities are listed in TFC-PLN-130.

Emergency Management Training

6. Provide initial and annual computer based refresher training to the following ERO members:

   - Building Wardens (course code # 351740/351741)
   - Personnel Accountability Aide (course code # 350055/351055)
   - Staging Area Managers (course code # 350055/351055).

4.11 Establishing Training and Drills

(7.1.11)

The basic requirements for drills are delineated in DOE/RL-94-02, Section 12.0, and are consolidated in TFC-ESHQ-EP-C-02. These requirements apply to all drills performed for the purpose of training and evaluating facility EROs.
A formal training program shall be provided for the instruction and qualification of all personnel comprising the hazardous facility ERO, low hazard facility ERO, general purpose facility ERO, and involved in conducting training and/or drills. Training shall be systematic and performance-based and developed using performance objectives.

4.11.1 Instructor Training and Emergency Management Professional Qualification

NOTE: Emergency Management personnel may not analyze, design, or develop training materials unless under the direct supervision of qualified Training Specialist to ensure consistency with TOC Training procedures and policies.

**Emergency Management**


2. Comply with Subject Matter Expert (SME) Instructor requirements as delineated in TFC-BSM-TQ-STD-06.

4.11.2 Training

**Emergency Management/Training**

1. Establish minimum emergency response training requirements for the roles and responsibilities of employees in accordance with DOE/RL-94-02, Table 12-1.

2. Incorporate the emergency response training requirements into the following:
   - Hanford General Employee Training
   - Facility Emergency Hazards Identification Checklist (7.1.8)
   - Production Operations ERO training
   - 222-S Laboratory ERO training.

3. Conduct a biennial review of emergency management training materials in accordance with TFC-BSM-TQ_ADD-C-01.

4. Submit a “Training Request Form” (A-6006-335) to WRPS Training for revisions to all ERO initial and annual refresher training courses to ensure compliance with Systematic Approach to Training (SAT) requirements.

5. Ensure all assigned members of the ERO staff attend prescribed training.

**Emergency Management/Training**

6. Provide members of the ERO staff with initial, facility-specific ERO training prior to assignment.

7. Provide members of the ERO staff with annual refresher training.
8. Provide members of the ERO staff with training that includes the following:

- Primary emergency response
- An overview of the Hanford (ICS)
- Facility-specific hazard communication (Hazard Assessment) and waste management
- Changes to EPHAs and/or EALs for each Hazardous facility
- ERO duties
- BED/BW responsibilities
- Staging Area Manager/Personnel Accountability Aide responsibilities
- A review of the facility-specific emergency response procedures
- Emergency checklist duties (identified in DOE-0223)
- Lessons learned
- “Emergency Coordinator” under WAC 173-303-360 to include all aspects of the facility’s contingency plan and required actions. (7.1.3)

NOTE: Controller/Evaluator training is provided by ES.

Emergency Management/Drill Controllers/Drill Evaluators

9. Attend site-level controller/evaluator training (or TOC equivalent).

Emergency Management

10. Submit all Course Completion Records (CCR) administered by EM to Training Records. (Examples of records to be submitted are drill participation Course Completion Roster (CCR), post drill reports, ERO proficiency documentation, and evaluator/controller CCR records.)

4.11.3 Drills

The basic requirements for drills are delineated in DOE/RL-94-02, Section 12.0, and are consolidated in TFC-ESHQ-EP-C-02. These requirements apply to all drills performed for the purpose of training and evaluating FEROs.

NOTE: EM conducts at least two EP drill per month, on average, to provide sufficient training as delineated in DOE/RL 94-02, Section 12.10.
1. Develop a drill program for maintaining specific emergency response capabilities in accordance with DOE/RL-94-02, Section 12.0, and TFC-ESHQ-EP-C-02. The program will cover both hazardous and non-hazardous facility drills.

NOTE: Participation in an actual event may be credited as participation in a drill for ERO proficiency when an event report is completed in accordance with TFC-ESHQ-EP-C-02, Attachment J; and the response to the event is graded as successfully passed, as determined by a qualified ES Drill Coordinator.

2. Ensure drills provide supervised “hands-on” training for members of the ERO.
   - Hazardous facility ERO members are required to demonstrate position specific proficiency during an evaluated drill on an annual basis (365 day frequency).
   - Drills will be based on hazards analysis of the emergency planning hazard assessment, and will include the full range of emergency responses and emergency management activities. (7.1.4)


4. Obtain concurrence from WRPS Operations for the annual drill schedule.

5. Ensure personnel assigned to a hazardous facility ERO attend all required training and participate in a drill within 365 days of their previous evaluated drill, as delineated in DOE-94-02, Section 12.0.

6. As Scenario Review Group members, review and approve, as necessary, drill packages.

7. Ensure drills do not have the potential for facility safety degradation.

8. Obtain approval from the applicable Operations organization for drills with the potential for the following conditions:
   - Significant impact to the facility
   - Change in the operating mode of the facility
   - Delay in plant schedule
• Shutdown of equipment specified by the facility safety analysis report, facility safety analysis report, or other safety basis documents.

9. Use the monthly drill schedule to identify organizations that are outside the facility and require coordination for drill participation (e.g., Hanford Fire Department or Patrol).

10. Conduct annual fire/evacuation drills in general purpose buildings where occupancy exceeds 500 persons or 100 persons above or below street level. (7.1.8)

11. Ensure general purpose facility personnel residing on the Hanford Site and within a plume exposure planning zone participate in a take cover or evacuation drill each calendar year to ensure personnel are knowledgeable of response to alarms. (7.1.8)

12. Conduct protective action, operational, and emergency preparedness drills at low-hazard facilities to ensure personnel are knowledgeable of response to facility-specific alarms and ensure adequate training for all ERO. (7.1.8)

13. Complete a Problem Evaluation Request, if determined necessary, to resolve any drill problems or issues. Issues identified as OUO will be tracked within the ES organization.

14. Complete a post drill report for all drills conducted.

15. Establish a distribution list of those organizations requiring a copy of the post drill report or determine and use an equivalent system for drill report distribution.

16. Distribute as applicable.


19. Provide input into Hanford Site exercises, as necessary.

20. Provide WRPS resources to the Hanford Site Emergency Management Program.

4.12 Emergency Equipment

Emergency Management/ Affected Organizations

1. Ensure all facility-specific emergency equipment has a surveillance program established that ensures readiness of the equipment (e.g., fixed and portable communications equipment, personal protective equipment, spill equipment, etc., as listed in
the facility-specific BEP, Table 9, and the Hanford Facility RCRA permit unit-specific addenda).

Affected Organizations

2. Ensure all emergency equipment is checked for proper operation after it has been used in a drill, or event, and before it is stored for the next drill, or event.

3. Ensure all consumable and disposed materials are restocked and fire extinguishers are recharged or replaced.

4. Ensure all depleted stocks of neutralizing and absorbing materials used in a drill, or event, are replenished.

5. Ensure all SCBA used in a drill, or event, are cleaned and refilled.

6. Ensure all protective clothing used in a drill, or event, is cleaned and restocked or disposed of.

Emergency Management/Facility Management

7. Maintain a Facility Emergency Response Information Board (FERIB) for each facility classified as an occupied general purpose facility. The information on each board shall include the following:

- Evacuation routes and staging area locations
- Utility disconnect information for heating, ventilation, and air condition systems (locations may be shown on floor plan)
- Emergency response actions
- Emergency signals/signs
- Names, location, and telephone numbers for building wardens and designated alternates
- Site emergency numbers, as follows:
  - 911 for point of contact (non-cellular telephones)
  - 509-373-0911 for point of contact (cellular telephones)
  - 376-2900 for the Hanford Emergency Operations Center Shift Office.
  - Production Operations Central Shift Office (373-2689)
- EM point-of-contact telephone number
• Telephone numbers in the shift offices for reporting hazards or spills
• Other useful telephone numbers (as applicable)
• Hazards within the building/facility and from nearby facilities (as applicable).

Emergency Management 8. In accordance with TFC-ESHQ-EP-P-04, perform and maintain annual surveillance of general purpose facilities to include Facility Emergency Response Information Boards in order to ensure accuracy and update, as necessary.

NOTE: Information on the boards shall include utility disconnect information, important telephone and radio channels/numbers, and worker emergency response procedure.


Emergency Management 10. In accordance with TFC-ESHQ-EP-P-04, perform and maintain annual surveillance of change trailers to include Emergency Response Center Boards in order to ensure accuracy and update as necessary.

4.13 Establishing a Predetermined Staging Area

NOTE 1: Each staging area shall be posted with the approved signage for staging areas. Staging area signs shall meet the following criteria:

• Size/color: 12 inches wide and 18 inches high; white background with red lettering.

• Text: STAGING – centered, 1 inch from the top, 2-inch letters; AREA – centered, 1 inch from the bottom, 2-inch letters; staging area number in center of sign, 6-inch numeral.

• Border: Half inch red.

NOTE 2: When evacuating due to a potential explosion or suspicious object, the Staging Area shall be moved back a minimum of 300 feet from the building.

Emergency Management 1. When establishing a staging area, consider the following:

• A location away from the flow of traffic or emergency response vehicles
• A distance of 100 ft or 1.5 times the height of the building, whichever is greater. If applicable, use the hazards in the facilities EPHA to determine a greater distance.
- A location that’s upwind from local prevailing winds.
- Adequacy of lighting and night evacuation.
- A means of determining wind direction (e.g., wind sock, flag pole in the vicinity) to determine staging area habitability for evacuation.

4.14 Establishing an Initial Incident Command Post (ICP)

Emergency Management 1. When establishing an initial ICP, consider the following:
- A location away from the general noise and confusion normally associated with the incident
- A location outside of the present and potential hazard zone
- It is able to expand as the incident warrants grows
- In a location that provides suitable security and access control as necessary
- Has been evaluated to determine the need for habitability checks.

4.15 Establishing Criteria for a Suitable Take Cover Facility

Emergency Management 1. When establishing suitable Take Cover facility, consider the following prior to allowing building occupancy per Attachment B of TFC-ESHQ-FP-STD-01:
- Take cover facilities should only be considered the practical protective action when evacuation cannot be done prior to a plume arriving at that location.
- A location should only be used for a short duration until a plume passes, then measures to evacuate should be taken as ultimately the air inside a take cover facility will become contaminated due to the air exchange rate of the facility. Generally no more than a couple of hours should be used as a sheltering guideline unless specific air exchange studies have shown that longer stay times are warranted.
- Two-way communication should be obtainable within take cover facility sufficient to communicate with ERO personnel. (e.g., phone, radio, etc.)
- Facility should be readily capable of securing doors, windows, and HVAC systems.
- Capability for restroom facility or a minimum of a portable toilet.

- Only normally occupied facilities not temporary structures such as tents, and facilities with roll up doors should be used as take cover facilities.

- Providing materials (e.g., plastic sheeting and duct tape) for known leaked prone areas such as a kitchen vent should be readily available.

- Written sheltering instructions (including medical emergency instructions) should be posted on approved Facility Emergency Response Information Boards.

2. Upon completion of shelter/Take Cover suitability criteria evaluation, provide recommendations on facility status to SES Manager.

3. Inform Facility Management of shelter/take cover suitability.

5.0 DEFINITIONS

No terms or phrases unique to this procedure are used.

6.0 RECORDS

The following records are generated during the performance of this procedure:

- Drill plans
- AARs
- Course completion rosters (CCRs)
- Hazards surveys
- Hazards assessments
- Building Emergency Plans
- Emergency action levels
- Vital Records (VR) Justification Form (RL-F-243.2.1).

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.

7.0 SOURCES

7.1 Requirements

1. 10 CFR 851, “Worker Safety and Health.”
5. DOE G 151.1-3, “Programmatic Elements.”

7.2 References

1. 222-S Laboratory FERO and Support Personnel listing.
2. RPP-13033, “Tank Farms Documented Safety Analysis.”
4. TFC-BSM-IRM_DC-C-02, “Records Management.”
5. TFC-ENG-DESIGN-C-36, “Hazards Assessment Consequence Calculation Process.”
15. TFC-OPS-OPER-C-51 “Operational Drill Program.”


ATTACHMENT A – FACILITY EMERGENCY RESPONSE STAFFING DETERMINATION CHECKLIST

- Name of Facility/Building Number: _______________
- Maximum Occupancy: _____
- Current Occupancy, as of Date: _____ Differential ____
- Occupant Work Schedule/Time in Office:
  - Day Shift/Office ____ Number of Workers ______
  - Day Shift/Field Work ____ Number of Workers ______
  - Shift Work/Office _____ Number of Workers ______
  - Shift Work/Field ______ Number of Workers ______
  - Differential Day/Shift Number of Occupants ______

- Facility Layout:
  - Single Story ___ Multi Story ___ Number ___
  - Below Ground Level ___ Number ___
  - Hardwall Offices/Rooms ___ Number ___
  - Cubicles ___ Number ___
  - Stairwells ____ Number ___
  - Entry/Exits ___ Number Approved for Use During Emergencies ____
  - Elevators ___ Number ___

  Multi-floor facilities, cubicle mazes, elevators, and stairwells require additional PAAs for safe coverage during emergencies in order to allow for safety of PAAs.

- Occupants with approved accommodations (Y/N) ____
  - Number ___
  - Locations:

  (Consider additional PAAs to assist for accommodations)

- Number of Staging Areas: ____
- Number of Assigned Staging Area Managers: _____
- Total Number of PAAs assigned: ______
- Number of PAAs required/checklist utilizing delta: _____
- Differential PAA Number +/- based on facility needs: ______

NOTE: Training requirements for BW/BED for Low-Hazards Facilities are listed in TFC-PLN-130.