

US EPA ARCHIVE DOCUMENT

Emergency Preparedness and Response

Background and Exhibits

Despite a facility's best efforts, accidents and other emergency situations can occur. Effective emergency preparation and response can reduce injuries, prevent or minimize environmental impacts, protect employees and neighbors, reduce asset losses, and minimize downtime.

An effective emergency preparedness and response (EP&R) program should include provisions for: (1) assessing the potential for accidents and emergencies; (2) preventing incidents and their associat-

ed environmental impacts; (3) responding to incidents (emergency plans and procedures); (4) testing of emergency plans and procedures periodically; and (5) mitigating impacts associated with accidents and emergencies. Consistent with the focus on continual improvement, it is important to review your emergency response performance after an incident has occurred so that you can correct deficiencies in the procedure. Use this review to determine if more training is needed or if emergency plans and procedures should be revised.

This is another area where you should not have to start from scratch. Several environmental and health and safety regulatory programs require emergency plans and/or procedures. Examples of requirements related to EP&R that may apply to you are listed below.

Regulatory Driver	Requirement
RCRA	Contingency Plan (LQG), Preparedness and Prevention Plan (LQG and SQG)
CWA	Spill Prevention, Control and Countermeasure Plan (SPCC) and Stormwater Pollution Prevention Plans (SPPP)
OPA	Facility Response Plan (portions of shipyard not subject to Coast Guard contingency plan requirements), SPCC
Coast Guard	Facility Response Plan
CAAA	Risk Management Plan
EPCRA	Community Right-to-Know Reporting and Coordination with Local and State Emergency Response Committees

Some facilities are addressing these numerous requirements through Integrated Contingency Plans that combine the requirements of numerous regulatory programs into one plan. The federal government has issued guidance for such a plan (Federal Register: June 5, 1996 [Volume 61, Number 109, Pages 28641-28664]) and electronic versions with corrections and updates are available at www.epa.gov/swercepp/p-tech.htm#one-plan. While reviewing your EP&R documents for your EMS, you may consider such a streamlined approach.

Because you probably already have programs in place for this area, this module focuses on additional items you will need to consider or address for your EMS. Specifically, you will need an EP&R procedure.

Getting Started

Two planning components that many facilities overlook are how they identify the potential for accidents and emergencies and how they prevent these occurrences or mitigate their impact. A Cross Functional Team (CFT) (made up of representatives from engineering, maintenance, and environmental health & safety, for example) can identify most potential emergencies by asking a series of “what if” questions related to hazardous materials, activities, and processes employed at the site. In addition to normal operations, the CFT should consider start-up and shutdown of process equipment and other abnormal operating conditions.

When developing procedures ask yourself how you will ensure that everyone (including new employees) know what to do in an emergency (for example, how would contractors or site visitors know what to do in an emergency situation?). Communicate with local officials (fire department, hospital, etc.) about potential emergencies at your site and how they can support your response efforts.

Here are some things to think about to expedite the development and maintenance of your facility’s EP&R procedure:

- Conduct mock drills to reinforce training and get feedback on the effectiveness of your plans/procedures.
- Post copies of your EP&R plans and procedures (or at least critical contact names and phone numbers) around your facility and especially in areas where high hazards exist. Include phone numbers for your on-site emergency coordinator, local fire department, local police, hospital, rescue squad, and others as appropriate.
- Revise and improve your plans as you learn from mock drills, training, or actual emergencies.

- Ensure that your EP&R procedure describes the following:
 - Potential emergency situations (such as fires, explosions, spills or releases of hazardous materials, and natural disasters);
 - Hazardous materials used on-site and their locations;
 - Key organizational responsibilities, including emergency coordinator;
 - Arrangements with local emergency support providers;
 - Emergency response procedures, including emergency communication procedures;
 - Locations and types of emergency response equipment;
 - Maintenance of emergency response equipment;
 - Training/testing of personnel, including the on-site emergency response team if applicable;
 - Testing of alarm/public address systems;
 - Evacuation routes and exits (map); and
 - Assembly points.

Use your answers to the questions provided in *Exhibit 13-1: Element Review Questions* to develop and maintain your EP&R plans and procedures.

Exhibit 13-2: Emergency Preparedness and Response Requirements Matrix provides a table that can be used to list potential emergency scenarios along with their potential impact, required actions, and needed procedures and training. A sample EP&R procedure that you can customize and use for developing your EP&R is included as *Exhibit 13-3: Procedure for Emergency Preparedness and Response*.

Exhibit 13-1: **Element Review Questions**

Questions	Your Answers
<p>Have we reviewed our operations and activities for potential emergency situations?</p> <p>If not, how will this be accomplished? Who should be involved?</p>	
<p>Do our existing emergency plans describe how we will prevent incidents and associated environmental impacts?</p> <p>If not, how will this be accomplished? Who should be involved?</p>	
<p>Have we trained personnel on their roles and responsibilities during emergencies?</p>	
<p>What emergency equipment do we maintain? How do we know that this equipment is adequate for our needs?</p>	
<p>How do contractors and other visitors know what to do in an emergency situation?</p>	
<p>When was our last emergency drill? Is there a plan/schedule for conducting future drills?</p>	
<p>Have we established a feedback loop so we can learn from our experiences?</p>	
<p><i>Our next step on emergency preparedness and response is to...</i></p>	

Exhibit 13-2: **Emergency Preparedness** and **Response Requirements Matrix**

Potential Emergency Scenario	Potential Environmental Impact	Action Required	Procedures Needed	Training Needed

Exhibit 13-3: **Procedure for Emergency Preparedness and Response** (EP-007)**1.0 Purpose/Scope**

This procedure defines the framework for preparing for and responding to emergencies involving potential environmental incidents at **[Facility's Name]**.

2.0 Activities Affected

All areas and departments

3.0 Forms Used

None

4.0 References

- 4.1 Procedure for Environmental Aspects, Objectives and Targets, and Programs (EP-003)
- 4.2 Procedure for Corrective and Preventive Action (EP-015)
- 4.3 Communication with Stakeholders (EP-004)
- 4.4 ISO 14001:1996, Element 4.4.7

5.0 Definitions

- 5.1 Environmental Incident or Emergency Situation: environmental releases that require an emergency response.
- 5.2 Emergency Response: actions taken by personnel outside of the immediate work area to address an environmental incident.

6.0 Exclusions

None

7.0 Procedure

- 7.1 Potential environmental incidents and emergencies likely to occur at the facility shall be identified semi-annually by the Cross Functional Team and documented according to Emergency Preparedness and Response (EP-007).
- 7.2 Methods to respond to, mitigate, and prevent environmental emergencies shall be established and maintained at the facility in the Security Office by the Emergency Response Coordinator.
- 7.3 Roles and responsibilities for communications within the facility and for obtaining outside support services shall be established and maintained at the facility via the emergency plans.
- 7.4 Environmental emergency methods and communications will be tested at least annually. The Security Office shall maintain records of these tests. Methods to respond to, mitigate, and prevent environmental emergencies shall be amended as required based on the results of these tests.
- 7.5 Following an environmental emergency, the cause of the emergency and corresponding emergency methods shall be reviewed. Corrective/preventive actions will be identified and undertaken by implementing EP-015. Methods to respond to, mitigate, and prevent releases that arise as a consequence of an environmental emergency shall be amended as required and the Environmental Management Representative or EMS Coordinator notified.
- 7.6 Where applicable, regulatory agencies shall be notified by the EMS Coordinator of environmental incidents consistent with EP-004.

Exhibit 13-3: Procedure for Emergency Preparedness and Response (EP-007) (continued)

8.0 General Rules

- 8.1 All emergency response activities are to be conducted within boundaries of training levels, appropriate procedures, and governmental regulations.
- 8.2 The Facility Manager shall designate an Emergency Response Coordinator.

9.0 Records

Records shall be retained consistent with the Procedure for Environmental Records (EP-005).

Record of Revisions

Revision Date	Description	Sections Affected

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