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# Training, Awareness, and Competence

## Background and Exhibits

There are two excellent reasons to train employees on environmental management and your EMS:

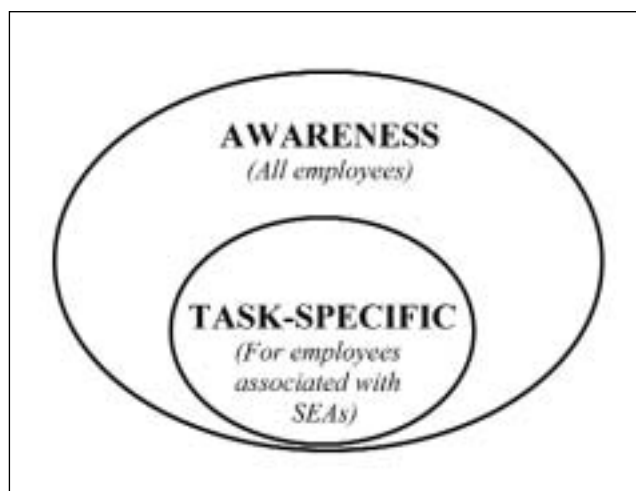
- Every employee can have potential impacts on the environment; and
- Any employee can have good ideas about how to improve environmental management efforts.

Each person and function within your facility can play a role in environmental management. For this reason, your training program should cast a wide net. Every employee and manager should be aware of the environmental policy, the significant environmental aspects (SEAs) of their work activities, key EMS roles and responsibilities, procedures that apply to their work, and the importance of conformance with EMS requirements. Employees also should understand the potential consequences of not following EMS requirements (such as spills, releases, and fines or other penalties).

All personnel should receive appropriate training and support to be competent at their work. Training should be tailored to the different needs of various levels or functions in the facility. However, training is just one element of establishing competence, which is typically based on a combination of education, training, and experience. For certain jobs (particularly tasks that can cause significant environmental aspects), you should establish criteria to measure the competence of individuals performing those tasks.

Training is needed both in technical work and for general awareness on the part of all employees. As shown in *Exhibit 8-1: Two Areas of EMS Training*, task-specific training should be offered as a subset of general awareness training.

## Exhibit 8-1: Two Areas of EMS Training



## Getting Started

Go through the Action Steps listed below and use your answers to the questions provided in *Exhibit 8-2: Element Review Questions* to begin the process of identifying your training program requirements. You can probably identify some general training needs now, but you will need to return to this module to add specific technical training needs that may be identified as you proceed with the EMS. (For example, you will have specific training requirements associated with operational controls for SEAs. Training plans developed during completion of *Module 12* should be integrated with the training identified in this module.) Sample training presentations on EMS for top management and for the Cross Functional Team are provided in Appendix E—Additional Tools.

## Action Steps

1. Identify all job functions that affect the environment. Small facilities may wish to identify individuals. Identify who is responsible for employee health and safety.
2. Identify the training and type of training these people currently receive that relates to environmental and health and safety concerns.
3. Determine if EMS education could be integrated with existing training or whether there should be special EMS training, at least in the beginning.
4. Identify training materials or programs available outside your facility. Some places to check include:
  - Trade associations;
  - Small Business Administration;
  - EPA;
  - State departments of environmental protection;

- Suppliers;
- Certified contractors; and
- Navy (Note: Materials from the Navy’s Occupational Safety, Health, and Environmental Training Program can be found online at [www.oshelink.com](http://www.oshelink.com)).

Don’t overlook the need for ongoing training when experiencing employee turnover. Be sure that new employees are trained soon after they arrive.

Customize the procedure provided in *Exhibit 8-3: Procedure for Environmental Training and Awareness (EP-008)* and its supporting forms, Training Needs Analysis—Environmental Courses Form (EF-008.01) and Training Needs Analysis—Procedures and Work Instructions by Area/Department Form (EF-008.02), to fit your facility’s environmental training and awareness needs.

Exhibit 8-2: **Element Review Questions**

Questions	Your Answers
<p>Do we have an <b>existing process</b> for environmental training?</p> <p>If so, does that process need to be revised? In what way(s)?</p>	
<p><b>What types of training</b> do we provide now (e.g., new employee orientation, contractor training, safety training)?</p> <p>How would EMS-related training fit with our existing training program?</p>	
<p><b>Who is responsible for training now? Who else might need to be involved</b> within our facility?</p>	
<p>How do we determine <b>training needs</b> now (list methods used)? Are these processes effective?</p>	
<p>Who is <b>responsible</b> for ensuring that employees receive appropriate training? How do we <b>track training</b> to ensure we are on target?</p>	
<p>How do we <b>evaluate training effectiveness</b>? (List methods used, such as course evaluation, post-training testing, behavior observation, etc).</p>	
<p>How do we <b>establish competency</b>, where needed (list methods used, such as professional certifications)?</p> <p>What are the <b>key job functions and activities</b> where we need to ensure environmental competency?</p>	
<p><i>Our next step on training, awareness, and competence is to...</i></p>	

Exhibit 8-3: **Procedure for Environmental Training and Awareness (EP-008)**

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<b>1.0 Purpose</b>	This procedure defines the process for identifying and planning environmental training and awareness at <b>[Facility's Name]</b> .
<b>2.0 Activities Affected</b>	All areas and departments
<b>3.0 Forms Used</b>	
3.1	Training Needs Analysis—Environmental Courses (EF-008.01)
3.2	Training Needs Analysis—Procedures and Work Instructions by Area/Department (EF-008.02)
<b>4.0 References</b>	
4.1	Procedure for Identification of Legal and Other Requirements (EP-001)
4.2	Procedure for Environmental Aspects, Objectives and Targets, and Programs (EP-003)
4.3	Procedure for Communication with Stakeholders (EP-004)
4.4	ISO 14001:1996, Element 4.4.2
<b>5.0 Definitions</b>	None
<b>6.0 Exclusions</b>	None
<b>7.0 Procedure</b>	
7.1	Training
7.1.1	A training needs analysis (TNA) and training schedule shall be completed and maintained by the Training Department to identify the level of instruction needed by personnel whose jobs may create a significant impact on the environment.
7.1.2	The needs analysis and training schedule shall be reviewed and updated where necessary, at least annually, and when requested by the Environmental Management Representative or designee in consultation with the Training Department to ensure its continuing adequacy.
7.1.3	Knowledgeable individuals with appropriate expertise and experience in shall develop the TNA: operational environmental management; relevant environmental legal requirements for environmental training; and training provision at the <b>[Facility's Name]</b> .
7.1.4	New, part-time, and transferred employees, as well as permanent on-site contractors, shall be included in the environmental training program.
7.1.5	The Training Department shall maintain records of each individual's environmental training.

## Exhibit 8-3: Procedure for Environmental Training and Awareness (EP-008) (continued)

## 7.2 Awareness

Environmental awareness shall be implemented as specified in the Procedure for Environmental Training and Awareness (EP-008).

## 7.3 Competence

Employee competence relevant to the EMS is determined through applicable training and through observation of performance by the employee's supervisor.

**8.0 Frequency**

Ongoing

**9.0 Records**

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

**Record of Revisions**

Revision Date	Description	Sections Affected

**Training Needs Analysis—Environmental Courses** (EF-008.01)

Date:

Course	Employees Requiring Training	Source of Training	Duration (Hours)	Frequency

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Training Needs Analysis—Procedures and Work Instructions by Area/Department (EF-008.02)

Procedure/ Work Instruc- tions	Title	Production Process Area/Department					Facility Support Area/Department							
		Metal Working and Cutting	Surface Preparation/Blasting	Welding	Surface Coating/Painting	Spec Bilge and Tank Cleaning	Purchase of Raw Material	Facility Plant Maintenance	Tank Farm and Fuel Transfer	Chemical and Waste Storage	Administration	Generation of Power, Compressed Air, Steam, and Process Water	Medical Facilities for Employees	All



## Examples

The following, *Example 8-1: Training Needs Analysis Matrix*, is an example of a partially-completed Training Needs Analysis—Environmental Courses Form (EF-008.01) based on *Exhibit 8-3: Procedure for Environmental Training and Awareness (EP-008)*.

### Example 8-1: Training Needs Analysis Matrix

Date:

Course	Employees Requiring Training	Source of Training	Duration (Hours)	Frequency
A/C Refrigeration Servicing (Stationary)	A/C maintenance			Once, each new maintenance staff
HAZWOPER: First Responder	Security			Annual
Environmental Awareness	Bulk materials, HAZWOPER 1st Responder Awareness, Integrated Emergency Response and Spill Contingency Plan, Prevention Plan, Waste Management Plan, Energy Management, Asbestos Management			Every other year
Incident Command Training	Security and supervisors			Annual
Fire Brigade Training	Emergency Response Team			For all new team members
RCRA Awareness Training	Waste Management Coordinator			Annual
EMS Lead Auditor Training	EMS Coordinator, Lead Internal Auditor			Initially
EMS Awareness Training	All employees and full-time on-site contractors			Initially and new hires as necessary
EMS Document Training (see also "Applicable Procedures by Department")	Employees and full-time on-site contractors whose work requires knowledge of the document			Initially, new hires, and when document changes occur
EMS Implementation Training	Cross Functional Team Initially and Environmental Management Representative			
EMS Internal Auditor Training	EMS internal auditors			Initially and new auditors

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