Training, Awareness, and Competence Background and Exhibits

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

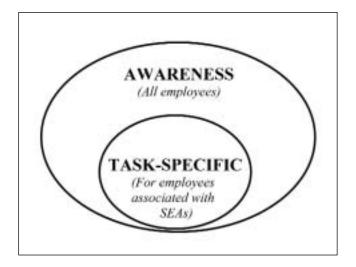
- Every employee can have potential impacts on the environment; and
- Any employee can have good ideas about how to improve environmental management efforts.

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

- 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).

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

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

1.0 Purpose

This procedure defines the process for identifying and planning environmental training and awareness at **[Facility's Name]**.

2.0 Activities Affected

All areas and departments

3.0 Forms Used

- 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)

4.0 References

- 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

5.0 Definitions

None

6.0 Exclusions

None

7.0 Procedure

- 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 **[Facility's Name]**.
 - 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:

| 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 $(\mathrm{EF}\text{-}008.02)$

| | | Procedure/ Work Instruc- tions | |
|--|--|--|---------------------------------------|
| | | Title | |
| | | Metal Working and Cutting | |
| | | Surface Preparation/Blasting | Production Process Area/Department |
| | | Welding | tion I |
| | | Surface Coating/Painting | rocess |
| | | Spec Bilge and Tank Cleaning | |
| | | Purchase of Raw Material | |
| | | Facility Plant Maintenance | Fac |
| | | Tank Farm and Fuel Transfer | Facility Su |
| | | Chemical and Waste Storage | pport A |
| | | Administration | \rea/l |
| | | Generation of Power, Compressed Air, Steam, and Process Water | Support Area/Department |
| | | 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 |