

Section 3: Training, Awareness, and Competence

As should be apparent from the previous sections of this manual, cross-sectional involvement from across your EMS fence line and organization is the key to a successful and viable EMS. What's the first step in achieving involvement? Training and awareness!

As you have learned by now, buy-in and understanding an EMS is not automatic, especially when reaching out to various levels within your organization. The context of your message and the level must be applicable to the staff receiving the message in order for them to connect their particular work activities and job functions to the EMS. In addition, sound operational management requires that personnel understand and follow the procedures outlining their roles and responsibilities. This simply cannot be accomplished without, you guessed it—training!

Want two great reasons to train employees about environmental management and your EMS?

- Every employee *can* have potential impacts on the environment; and,
- Any employee *can* identify positive ways in which to improve environmental management.

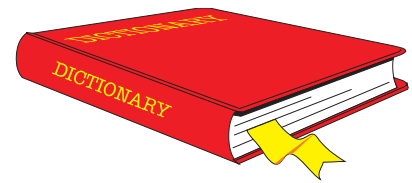
As part of your EMS, you will verify (i.e., have documented training records) that everyone has received general awareness training about the EMS, your environmental policy, and what the EMS means to each employee doing his/her job. You will also verify that each person whose job involves a significant environmental aspect is trained and competent (i.e., based on certification, education, etc.) to implement procedures and follow regulations to minimize the environmental impact of their operations.

Step-by-Step Guide to Training and Awareness

- Step 1) Assess EMS Training Needs
- Step 2) Review and Integrate EMS Training with Your Current Training and Methods
- Step 3) Conduct, Document and Maintain Training Records
- Step 4) Develop a System Procedure/Plan for EMS Training, Awareness & Competence
- Step 5) Check Your Training, Awareness and Competence for EMS conformance



Key Section Terms



EMS Awareness Training – Training involving an overview of the basics of your EMS, including your environmental policy, significant aspects, objectives and targets, and the importance of operating under specific procedures and work instructions (operational controls) required under the EMS.

Competency Training – Employees whose work may create a significant environmental impact must get appropriate training and be deemed competent based on education, training or experience. For example, most wastewater facilities need to have state licensed operators. The license is a way to demonstrate competency.

System Procedure – An EMS required document that establishes an element's purpose, scope, roles & responsibilities, the tasks to be completed, and where and how the associated records and documents are maintained.

Assessing Training—Ask Yourself:

- What jobs affect the environment?
- What job activities involve a significant aspect?
- What types of training do we currently conduct in these areas?
- Can EMS roles/responsibilities/controls be included in this training?
- Can we tweak the training material we already have or do we need to develop new materials?
- How do we currently maintain training records?

Creative ways to Provide EMS Awareness Training

- ▶ New employee flyer
- ▶ Payroll or pay-stub insert
- ▶ Training videos
- ▶ Green mousepad
- ▶ Monthly newsletters

Three Keys to Success

(from wastewater facilities):



1. Relate EMS and environmental training to employee work activities.
2. Create one training plan/program and integrate EMS training into it. For example, if you have an all-employee health and safety training, add a few EMS slides to the presentation.
3. Have division managers present at training sessions to show support for the EMS program.

Times When Environmental Training is Typically Needed

- ◆ New employee is hired
- ◆ Employee is transferred to a new job
- ◆ Procedures are changed
- ◆ New process, material or equipment is introduced
- ◆ A change to objectives and targets or EMPs is made
- ◆ New regulation affecting your activities
- ◆ To stay current on operations (e.g., annual/refresher)

Step 1) Assess EMS Training Needs

All personnel receive training. Environmental/EMS training should be tailored to the different needs of employees and to various levels or functions in your wastewater organization. For example, someone in operations who handles hazardous chemicals will need a different type of environmental training from someone in procurement who purchases hazardous chemicals. However, keep in mind that both employees could potentially have significant impacts on the environment and must receive at least general EMS awareness training.

Who needs to receive environmental training at your facility? In assessing EMS training needs for your wastewater facility, consider both general and specific needs. For example:

- ▶ “What environmental management procedures affect Stu’s daily work and what happens if they aren’t followed?”
- ▶ “What environmental impacts might Stu’s work cause?”
- ▶ “What legal non-compliance issues might Stu’s work potentially raise?”
- ▶ “What broad understanding of environmental issues and the EMS does Stu need?”
- ▶ “What type of training does Stu currently receive?”

For your EMS, everyone must understand:

1. The environmental policy
2. The significant environmental impacts of his/her work activities
3. The environmental objectives and targets you have set
4. Key EMS roles and responsibilities
5. Environmental procedures and work instructions that apply to their work
6. The importance of following your EMS and environmental requirements, and the potential consequences of not doing so.

Step 2) Review and Integrate EMS Training with Your Current Training and Methods

Build on what you have in place and what currently works. Do you have an existing training procedure or plan? If so, build upon this to ensure that you are meeting your EMS requirements. Also, look at the training you conduct for environmental compliance, health and safety, and other related areas. What about certification training? You may find that many of your existing training efforts will satisfy some of the requirements for your wastewater EMS.

REMEMBER



Every person at your wastewater treatment facility can play a role in environmental management. Train your employees to help them understand their roles and responsibilities.

Step 3) Conduct, Document and Maintain EMS Training Records

Just like any other training you conduct, you will need to document and maintain (verify) your EMS training. For an EMS auditor, training can be verified by a signature and date that an employee attended a class on EMS Awareness. Another idea is an updated training matrix tracking training sessions and required and actual attendance. Again, consider how you currently track training needs and participation.

Remember, for your EMS, you need to train all employees on the EMS basics, including your environmental policy, objectives and targets, and how the EMS applies to their day-to-day activities. In addition, employees in areas with the potential to create significant environmental impacts must understand how to minimize those impacts and the potential consequences of not following EMS requirements.

CASE STUDY

At the New Hampshire Department of Transportation (NH DOT), Bureau of Traffic, an effort was made to combine the training requirements of the Safety and EMS programs. Combining the training programs helped reduce the overall time spent in training and administration of their programs. For example, 127 full and part time positions needed training. By combining the training requirements, the Bureau of Traffic saved about 7.5 hours each year per employee. This amounted to 127 additional workdays that was available to perform normal work activities.

EMS and Competence

What does it mean to be competent in your job under an EMS? It means that employees in certain jobs (particularly operations that can cause significant environmental impacts) have a combination of education, training, and experience to do their day-to-day tasks and ensure that your organization properly manages its significant aspects and environmental impacts. Make sure you maintain records of their experience and training (certifications, education, and previous job records, etc.) just as you would any other verifiable training records at your facility.

Consider cost effective and creative ways to train your staff on your EMS. For example, use a video for EMS awareness training. Computer-based training also may be an option, especially for employees who spend much of their time in the field and/or work varying hours/shifts.

Involving Contractors and Temporary Staff

Make sure that contractors and temporary staff are trained on the basics of your EMS (awareness, policy, emergency response, etc.). They need specific training on their roles and responsibilities in areas that can cause significant impacts or in which objectives and targets are set. The wastewater facilities that have EMSs in place that contributed to this Handbook provide general EMS awareness training to their contractors and temporary staff, and involve them in the aspect/impact analysis and in the setting of objectives and targets if their work can cause a potential environmental impact.

Three Lessons Learned

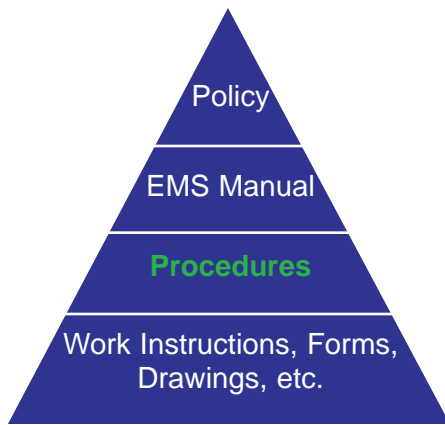
(from wastewater facilities):

1. Identify and document training requirements for each employee. For example, consider using a training matrix or table to identify employee titles, needs, and due dates.

A sample training matrix is attached at the end of this section and in Appendix B.

2. Get feedback from employees on the effectiveness of training materials and adjust your training based on their feedback.

3. Make your EMS training part of other training you currently conduct (e.g., new employee orientation, health and safety, etc.).



A Training, Awareness, and Competence system **procedure/plan** is required for this element. A system procedure defines the purpose (why the procedure is needed), scope (to what operations/areas/staff the procedure applies), roles & responsibilities (who needs to complete the tasks), and the tasks that need to be completed for this element.



Three Things to Avoid

(from wastewater facilities):

1. Making your EMS training too technical or “jargony.” Remember the KISS principle!
2. Conducting training sessions that are too long. Keep your training sessions short, interesting and to the point.
3. Having training sessions that “preach” EMS or environmental requirements. Remember to keep a “blue jeans, no tie” (relatable) message.

Step 4) Develop a System Procedure/Plan for EMS Training, Awareness & Competence

When you’re satisfied that your process for training, awareness, and competence conforms to the EMS requirements, document the process in a system procedure, and update your training plan. Remember, most organizations have some type of training in place before they begin their EMS. Build off your existing procedures and plans.

Your system procedure should clearly define what you will do, roles and responsibilities, when they will do it, how the information will be communicated, and where the information will be stored. This documented procedure will be a consistent, easily accessible, and clearly ensure that this element of your EMS is carried out according to plans.

For samples of Training, Awareness, and Competence procedures from wastewater facilities, see Appendix A.

CASE STUDY

Training doesn’t always have to be done in a classroom setting. The City of San Diego Environmental Services Department, Refuse Disposal Division conducted some of its EMS awareness and competency training in “tailgate sessions.” Rather than pulling personnel off-site for training, they took the training sessions to their employees. Before starting up equipment in the morning or during breaks, personnel would gather and receive training on the environmental policy or a new work instruction. This approach saved a significant amount of time and eliminated the need to pull personnel off-site for training.

Step 5) Check Your Training, Awareness and Competence for EMS Conformance

About two or three months after you have documented and implemented your training, awareness, and competence procedure, check to see if it is actually working according to your plan. Here are some questions to investigate:

Check ✓

1. Do you have a current process for conducting environmental training?
2. What types of environmental training do you currently provide?
3. Have you conducted EMS Awareness training for all employees?
4. Have you conducted specific training for employees in significant aspect areas?
5. How do you verify competence?
6. How do you evaluate training effectiveness?

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Training, Awareness, and Competence

(Cut out this section for handy reference)

The **Purpose** of this EMS element is to:

- Identify and track environmental and EMS training requirements.

The **Result** of this EMS element is:

- A system procedure/plan (EMS document) that identifies and tracks your environmental and EMS training needs.

Before you Begin this EMS element:

- Acquire a knowledge on your organization's current training programs and methods.
- Complete your environmental aspect and impact assessment and determine significance.

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ISO 14001 Requirements	Links to Other EMS Elements	Required Documents & Records	Optional Documents & Records
<p><i>Training, Awareness and Competence</i></p> <p>The organization shall identify training needs. It shall require that all personnel whose work may create a significant impact upon the environment, have received appropriate training. It shall establish and maintain procedures to make its employees or members at each relevant function and level aware of</p> <p>a) The importance of conformance with the environmental policy and procedure and with the requirements of the EMS;</p> <p>b) The significant environmental impacts, actual or potential, of their work activities and the environmental benefits of improved personal performance;</p> <p>c) Their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirements of the EMS, including emergency preparedness and response requirements;</p> <p>d) The potential consequences of departure from specified operating procedures.</p> <p>Personnel performing the tasks which can cause significant environmental impacts shall be competent on the basis of appropriate education, training and/or experience.</p>	<p>Environmental Aspects - Employees that work in areas of potential significant impact need to be aware they are in these areas, and need to be trained on ways to minimize potential significant impacts.</p> <p>Legal and Other Requirements - Employees in regulated areas should be trained and have knowledge of regulatory requirements and the consequences of noncompliance.</p> <p>Structure & Responsibility - All employees need to understand and be trained in their EMS roles and responsibilities, including the basics of your EMS and your EMS Policy.</p> <p>Records - Conduct, document, and maintain training and competency records, including EMS awareness and training on significant aspects and objectives and targets.</p>	<p>Training Plans/Procedures</p> <p>Environmental Training Records</p> <p>EMS Awareness Training</p> <p>EMS Significance Area Training</p> <p>Certificates/Education Records (to verify competency) in significant areas</p>	<p>Job Category Training Matrix</p>

The EMS Coordinator ensures delivery of the appropriate training modules according to this matrix to all personnel within the EMS scope.		Staff							Contractors				
		Operations Managers	Planning Officer	Engineering Officer	Engineering Technicians	Operations	Field Operations Supervisor	Other Field Staff	Other Office Staff	Supervisor	Engineering Roads	Layout	Hauling
Training Modules	Content												
EMS 1	EMS Awareness	X	X	X	X	X	X	X	X	X	X	X	X
EMS 2	EMS Procedures	X		X	X	X	X	X					
Procedures and WIs 1	Job Specific Procedures				X	X	X	X		X	X	X	X
Legal Requirements	CMOM			X	X	X	X	X		X	X	X	
	CWA	X			X	X	X			X			
	Pretreatment	X	X	X	X	X	X	X	X	X	X		X
Emergency	Action Plans				X	X	X	X		X	X	X	X
	Spill Response				X	X	X	X		X	X	X	X