Environmental Web-Based Training: Why You Won’t Meet Your Environmental and Sustainability Goals Without It

Concurrent Session 12683
Wednesday, May 11, 2011, 9:00 AM - Room 287
Topic Overview

> The need for environmental training

> Role of a Training Plan

> Why coordinate training activities?

> Essential components of a training program

> Components of a Training Plan

> Case Study: The Minnesota Army National Guard (MNARNG)
The Need for Environmental Training

> Compliance training requirements
  – Federal, state, local
  – Expressed
  – Implied

> DOD Policies

> Military Orders

> Environmental Management Systems (EMS)

> Inspections
Role of a Training Plan

> A Training Plan establishes:

- All applicable training drivers
- **Who** needs **what** training **when**, and **how** to obtain it
- Shared resources for PMs, trainers and students (courses, procedures, systems)
- System specifications (e.g., Learning Management System, document libraries)
- Present and future needs
Why Coordinate Training Activities?

> Many training activities are duplicated (shareable)

  – Dissemination (WBT, ILT scheduling and delivery, training assignments)
  – Testing & certificates
  – Tracking, reporting
  – Training events

> Shareable training content

  – Example: hazardous waste disposal

> Quality assurance/quality control
Essential Components of a Training Program

- **Training Requirements**
  - What requirements apply to our organization?

- **Courseware**
  - What courses are needed?
  - How should new training be developed?

- **Dissemination**
  - Who needs what training when?
  - How should training be delivered?

- **Tracking & Reporting**
  - What should we track?
  - Who needs what data?
Components of a Training Plan

- **CTR Analysis**
  - **Course List**
    - ILT, CBT/WBT, blended learning
  - **New Courseware Development**
    - Common procedures & standards
  - **Tracking & Reporting**
    - Access to data on the LMS.
  - **Job/Training Crosswalk**
  - **Learning Management System (LMS)**
    - Web portal for training delivery, ILT scheduling, and tracking

- **Task Analysis**
- **Billet Lists (criteria)**
Case Study: The Minnesota Army National Guard

> Project Overview

> Development Process

> Training Plan components
  – CTR Analysis, Course List, courseware development, Job/Training Crosswalk, training dissemination, tracking & reporting

> Impact of SCORM

> Results & Lessons Learned
MNARNG Training Plan: Project Overview

> MNARNG (JFMN-FME) needs:

– Implement mandated ECO training
– Coordinate and standardize training activities
– Use technology to increase efficiency and quality
– Comprehensive tracking/reporting capability

> Solution: an Environmental Training Plan for the organization, to include web-based training and a learning management system (LMS)
MNARNG Training Plan: Development Process

1. Compliance Training Requirements (CTR) Analysis
2. Course List
3. New Course Development
4. Job/training Crosswalk
5. Learning Management System (LMS)

Roles & Responsibilities
# CTR Analysis

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<th>Regulatory Citations</th>
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<td><strong>Applies To:</strong></td>
<td><strong>Training &amp; Record Keeping Requirements</strong></td>
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<td>Hazardous Waste Generator Training: Large Quantity Generators (LQG)</td>
<td>MR 7045.0292 Subp. 1 (G) (MPCA)</td>
<td>Facilities generating greater than 1000 kilos (2200 lbs) of hazardous waste per month (large quantity generator).</td>
<td><strong>A large quantity generator</strong> may accumulate hazardous waste on site without a permit or without having interim status if various conditions are met, to include meeting all training and familiarization requirements under MR 7045.0588 (see above) and MR 7045.0574 (see below). <strong>Training Records:</strong> See requirements under MR 7045.0588 (above).</td>
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<td>Hazardous Waste Generator Training: Small Quantity Generators (SQG)</td>
<td>40 CFR 262.34 (a)4 &amp; (d)(5)iii (EPA)</td>
<td>Facilities that generate between 100 and 1000 kilograms (220-2200 lbs) of hazardous waste in a calendar month (small quantity generator).</td>
<td><strong>A small quantity generator</strong> may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that the generator meets various requirements, to include ensuring that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies. (d)(5)(iii)). <strong>Training Records:</strong> See requirements under 40 CFR 265.16 (above).</td>
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<tr>
<td>Hazardous Waste Generator Training: Small Quantity Generators (SQG)</td>
<td>MR 7045.0292 (5)(H)(3) (MPCA)</td>
<td>Facilities that generate between 100 and 1000 kilograms (220-2200 lbs) of hazardous waste in a calendar month (small quantity generator).</td>
<td><strong>A small quantity generator</strong> may accumulate up to 3000 kilograms of hazardous waste that is not acute hazardous waste on site without a permit or without having interim status, provided the generator meets various requirements, to include ensuring and documenting that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies. <strong>Training Records:</strong> Documentation must verify that all employees have received training on proper waste handling and emergency procedures relevant to their responsibilities. (See also, MR 7045.0294, Subpart 3a)</td>
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<td>Hazardous Waste Generator Training: Conditionally Exempt Small Quantity Generators (CESQG)</td>
<td>40 CFR 261.5 (EPA)</td>
<td>Facilities generating less than 100 kilos (220 lbs) of hazardous waste per month.</td>
<td><strong>This regulation does not specifically require hazardous waste training for personnel; however, implementing this regulation implies that facility personnel are knowledgeable in making the quantity determination.</strong></td>
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Course List

Course Index – By Category

Command Messages
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Environmental Compliance Officer
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Spill Prevention, Response, and Control
MNARNG Spill Prevention, Response, and Control Awareness Training .......................... 81
Courseware Development

**Environmental Training Manager**
Determine whether the course will be direct-authored by the Instructor, or authored by Courseware Development.

- **Yes**
- **No**

**Determining Authorship**
- **Yes**
  - Continue to the next step.
- **No**
  - **Environmental Training Manager**
  - Content Gathering
    - Gather the content and media needed for developing the computer-based training; provide materials to Courseware Development.

**Environmental Training Manager**
Instructor

**Content Gathering**
Gather the content and media needed for developing the computer-based training; provide materials to Courseware Development.

**Courseware Development**

**Design and Development**
- (a) Apply eLearning instructional design principles to the content, and storyboard the course
- (b) Determine the development platform
- (e) Record and edit audio, if used
- (c) Develop and program the course
Courseware Development (cont.)
# Job/training Crosswalk

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Training Dissemination
# Tracking & Reporting

![Minnesota Army National Guard Learning Management System](image)

### Filter results by:
- **Loaded filter:** Select a saved filter
- **Number of conditions:** 1

### Save filter:
- **Name:**
- **Save Filter**

### Filters:
- **Course Type:**
- **State:**
- **Additional Duty Assignment:**
- **Full-time Military Duties:**
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The Impact of SCORM

> **Shareable Content Object Reference Model**

- A universal standard enabling web-based courses and LMS’s to “talk” to each other

> Real world needs/demands:

- All online training can’t come from one vendor
- You may want to develop your own training
- There are existing online training courses
- You need to track, report and manage certificates

> SCORM is part of the solution
The Impact of SCORM: Sample Upload
Results

> Enhanced environmental compliance status

> More efficient training delivery
  – 90% conversion to computer-based training
  – Automation of course assignments, tracking, reporting and certificates using a Learning Management System (LMS)
  – Resource sharing (SCORM, LMS, web-based training, online library, courseware development procedures)

> Improved coordination of the training function throughout all environmental programs
Lessons Learned

> Plan before building a training program or the supporting systems

> Place funding mechanisms early

> Assemble the right team
  – Command support
  – Environmental subject matter experts
  – Instructional design and course development specialists
  – Information Management office
  – Plans Operations and Training
  – Human Resources
Lessons Learned

> Leverage technology (LMS, CBT, electronic libraries) appropriately to increase efficiency and effectiveness

> Assume the plan will not be static – build feedback and continuous improvement into plan implementation
Contact Information:
Mr. Russell Goff
EM-Assist, Inc.
(919) 665-8094
rgoff@EM-Assist.com