



# EHS Compliance Update

Winter 2007

EHS Management Strategies, LLC

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### Lower your Environmental Reporting Costs

Every year manufacturing companies struggle with completing their annual environmental reports. PME will help you complete these reports and help you simplify your data management so that next year you can be ready to do these reports your self and save MONEY!! The reports include:

- ◆ MAERS
- ◆ SARA Tier II
- ◆ Biennial Waste Reports
- ◆ Toxic Release Inventory (TRI)
- ◆ Annual Waste Water

We will get these report completed accurately and on-time!!!

## 2007 Environmental, Health, Safety (EHS) Goals

It is time to plan for 2007 and it may be good opportunity to evaluate your environmental, health and safety (EHS) programs to establish goals for the year. Many times these programs go neglected until something bad happens—employees get hurt, MDEQ/MIOSHA inspections find violations, or spills occur. However, one of the most effective ways to improve your EHS programs is to establish annual goals that can incrementally improve your programs and reduce the likelihood if these events. You can reduce the costs and over all risks to your organizations by improving these programs at your own pace and using internal staff. Here is how to get started:

**Step 1—Assess your existing EHS systems:** The goal is to establish work practices that result is compliance with EHS regulations and minimize risks, not to setup compliance programs that tell you how to do your work. This can be accomplished by conducting an assessment of your current compliance with regulation and to benchmark these against various management systems.

**Step 2—Evaluate the Findings:** Once you have completed your assessment and bench marking activity the findings and recommendations should be reviewed. The goal is to prioritize the activities to address the highest risk activities first.

**Step 3—Develop Implementation Schedule:** This schedule will consider the risks of all the identifies gaps in either compliance or areas for improvement and prioritize them for completion. The goal is to plan to complete these activities as internal staff have time and to minimize annual expenditures.

Facilities can complete these assessments with internal staff, staff from other facilities,

*(Continued on page 5)*

## Confined Space Order of Atmospheric Testing [1910.146 App B]

According to [29 CFR 1910.146 Appendix B](#), a test for oxygen must be performed first when testing the atmosphere of a confined space to determine if it is safe for entry. The oxygen test is performed first because most combustible gas meters are oxygen-dependent and will not provide reliable readings in an oxygen-deficient atmosphere. Combustible gases are tested next because the threat of fire or explosion is both more immediate and more life threatening, in most cases, than exposure to toxic gases and vapors. If there is any potential for the presence of toxic gases, tests for toxic gases are performed last.

Duration of testing: Measurement of values for each atmospheric parameter should be made for at least the minimum response time of the test instrument as specified by the manufacturer. A comprehensive knowledge of the instrument being used, as well as calibration, is imperative prior to the evaluation of the confined space atmospheric conditions.

- ◆ Lear Corporation
- ◆ Kraft Foods
- ◆ Alticor
- ◆ Delphi
- ◆ Dextech
- ◆ Consumers Energy
- ◆ Dana Corporation
- ◆ American Axle & Manufacturing
- ◆ General Motors
- ◆ Steel Case
- ◆ DTE Energy
- ◆ Pfizer
- ◆ Eaton Corporation
- ◆ Median Automotive
- ◆ Exelon Energy
- ◆ Cascade Engineering
- ◆ Gill Industries
- ◆ Herman Miller
- ◆ Hayworth
- ◆ SAIC
- ◆ Honeywell
- ◆ Textron
- ◆ Barnes Aerospace

## D003 Characteristic of Reactive Hazardous Waste [40 CFR 261.23]

Unlike the D001 and D002 waste codes, where there are [test methods](#) that may be used to determine if a solid waste displays that particular characteristic, the D003 definition at [40 CFR 261.23](#) does not have a designated test method to help in waste classification. Each property of the D003 code is a narrative description. If a solid waste displays any one of these eight descriptions, then it displays the reactivity characteristic and is a D003 hazardous waste.

Unfortunately, because neither 40 CFR 261.23 nor EPA's Handbook, "[Test Methods for Evaluating Solid Waste](#)" (SW-846) prescribe methods for characterizing D003, this can make it difficult for a waste generator. If an EPA or state inspector believes that a waste stream exhibits the reactivity characteristic, it is up to the generator to prove the inspector wrong if the generator believes the waste is not reactive. Without an approved test method, this can be difficult.

If a laboratory tells you it can do a D003 reactive cyanides and sulfides test, it is probably testing for total or chlorine-amenable cyanides and sulfides. This does not necessarily show whether a waste is reactive or not.

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## How to Calculate Allowable Exposures to Multiple Air Contaminants [29 CFR 1910.1000(d)]

Employees are frequently exposed to more than one chemical in the workplace at a time. According to [29 CFR 1910.100 \(d\)](#), when employees are exposed to more than one chemical that has a permissible exposure limit established by OSHA, the allowable exposure level must be calculated using the following formula:

$$E_m = (C_1 \div L_1 + C_2 \div L_2) + \dots (C_n \div L_n)$$

Where:

$E_m$  is the equivalent exposure for the mixture.

$C$  is the concentration of a particular contaminant.

$L$  is the exposure limit for that substance specified in [Subpart Z of 29 CFR 1910](#). ([Z-1](#), [Z-2](#), or [Z-3](#))

The value of  $E_m$  can not exceed 1; if it does, the employee exposures would exceed the permissible limits. To illustrate the formula, consider the following exposures:

Substance	Actual concentration of 8-hour exposure (ppm)	8-hour TWA PEL (ppm)
Chemical B	500	1,000
Chemical C	45	200
Chemical D	40	200

Substituting in the formula, we have:

$$E_m = 500/1,000 + 45/200 + 40/200$$

$$E_m = 0.500 + 0.225 + 0.200$$

$$E_m = 0.925$$

Since  $E_m$  is less than 1, the exposure combination is within acceptable limits.

### Environmental Trivia

- Recycling a ton of office paper can save how many gallons of oil?
- a. 3.8 gallons
  - b. 38 gallons
  - c. 380 gallons
  - d. 3,800 gallons

See Page 3





Training Schedule Public Courses				
Course	Cost	February	March	April
ANSI Z10 OH&S Management System Implementation <b>(new)</b>	\$659	Phoenix, AZ	Chicago, IL Detroit, MI	Tampa, FL
ISO 14001 Internal Auditor (2-days)	\$699	Grand Rapids, MI Phoenix, AZ	Detroit, MI Toledo, OH Saginaw, MI	Chicago, IL Cleveland, OH Traverse City, MI
Advanced EMS Auditing (ISO 14001:2004)	\$499	Orlando, FL	Detroit, MI Grand Rapids, MI	
ISO 14001 Implementation	\$699	Orlando, FL Chicago, IL	Detroit, MI Grand Rapids, MI	Traverse City, MI Chicago, IL
ISO14001 Lead Auditor Training	\$1,575*	Cleveland, OH Indianapolis, IN	Buffalo, NY Tampa, FL	Detroit, MI Minneapolis, MN
OSHAS 18000 Overview and Implementation	\$499	Orlando, FL	Detroit, MI	Chicago, IL Atlanta, GA
TOTAL Waste Program (DOT & RCRA)	\$499	Grand Rapids, MI Detroit, MI	Chicago, IL Cleveland, OH	Traverse City, MI Toledo, OH
TS16949 Lead Auditor Training	\$1,575*	Fort Wayne, IN Chicago, IL	Detroit, MI	Grand Rapids, MI Hartford, CT
TS16949 Internal Auditor (3 day)	\$1095*	Detroit, MI	Grand Rapids, MI	Chicago, IL
Hazwoper Refresher 8 hr, 24 hr, and 40 hr (Many more locations and dates please contact us) <b>** Guaranteed classes</b>	\$125 \$425 \$525	Detroit, MI Chicago, IL Lansing, MI Indianapolis, IN <b>Cleveland, OH</b>	<b>Detroit, MI</b> <b>Chicago, IL</b> St. Louis, MO Indianapolis, IN	Detroit, MI Chicago, IL Lansing, MI Indianapolis, IN
OSHA 30 Hours—General Industry	\$750		Indianapolis, IN	
OSHA 10 Hours—General Industry	\$295	Livonia, MI Indianapolis, IN		
OSHA Confined Space	\$235	Detroit, MI Chicago, IL	Atlanta, GA	

To get specific dates and to register contact Jim Charles at [Charles@PMenv.com](mailto:Charles@PMenv.com). (\*) These courses offered at significant discounts for 30, 60, and 90 day prepayment. Don't see your location contact us!!!

All pricing based on 30 day advanced payment subject to our cancellation policy. Add \$100 for late registrations.



Any of these courses can be held at your location with 6 or more students

## Penalties for Non-Compliance with DOT Regulations [49 CFR 107.329]

On February 17 the DOT revised its regulations at [49 CFR 107.329](#) to increase the amounts levied for civil or criminal penalties for shipments of hazardous materials: The maximum civil penalty was increased from [\\$32,500](#) to \$50,000 for a knowing violation, and to [\\$100,000](#) if the violation results in death, serious illness or severe injury to any person, or substantial destruction of property.

- ◆ The minimum civil penalty has reverted from \$275 to \$250, except a minimum civil penalty of \$450 applies to a violation related to training.
- ◆ Criminal penalties now apply to both reckless and willful violations (as well to as a knowing violation of the prohibition in 49 U.S.C. 5104(b) against tampering with a marking, label, placard, or description on a shipping document) of Federal hazardous material transportation law or the regulations, orders, special permits, and approvals issued there under.
- ◆ The maximum criminal penalty of 5 years imprisonment and a fine in accordance with Title 18 of the United States Code (\$250,000 for an individual, \$500,000 for a corporation) was retained, except the maximum time of imprisonment has been increased to 10 years in any case in which the violation involves the release of a hazardous material which results in death or bodily injury to a person.

One of the main violations cited is lack of DOT training or out of date training. Personnel are required to be trained in accordance with 49 CFR 172 Subpart H **every 3 years**.

## MDEQ MBP3 Update

The MBP3 continues its course of healthy growth with new partners joining the ranks of pollution prevention, energy efficiency and environmental stewardship. The partnership currently has 326 registered partners located in 129 different cities representing 47 counties. Recent additions to the partnership include:

- |   |  |
|---|--|
| ◆ Dr. Shrink, Inc. (Manistee)                   | ◆ Ventura Manufacturing (Zeeland)            |
| ◆ Maine Plastics, Inc. (Schoolcraft)            | ◆ MACSTEEL – MONROE (Monroe)                 |
| ◆ Landfill Avoidance Systems, LLC (Birmingham)  | ◆ Fort Custer Training Center (Battle Creek) |
| ◆ Bata Plastics, Inc. (Byron Center)            | ◆ Michigan State University (East Lansing)   |
| ◆ The Creation Station (Lansing)                | ◆ Detroit Diesel Corporation (Detroit)       |
| ◆ The Brown Company of Ionia, LLC (Ionia)       | ◆ Kettering University (Flint)               |
| ◆ Sustainable Research Group (Grand Rapids)     | ◆ Surplus Coatings (Grandville)              |
| ◆ Global Engine Manufacturing Alliance (Canton) |  |

## 2007 Environmental, Health, Safety Goals (Con't)

or using external consultants. The goal is to make sure the personnel conducting the assessment has the need experience with both EHS regulations and ability to bench mark existing programs. Please contact PME with any questions on how to get started or tools to help complete an assessment of your operations. Contact: James Charles, PE at 616-285-8857 or [Charles@PMenv.com](mailto:Charles@PMenv.com).



Don't start building your SAFTEY Manual from Scratch. Contact us to discuss how our EHS tools can save you time and money AND build an OSHA complaint program. [Charles@PMenv.com](mailto:Charles@PMenv.com) or (616) 285-8857

**EHS Management Strategies, LLC**

**Contact:**

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 EHS Services  
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**RAB Lead Auditor and Internal Auditor Programs**

Internal Auditing is one of the key’s to an effective management system. EHS offers these programs for **ISO14001, OHSAS18001, TSI6949, and ISO9000** management systems.

**Lead Auditor Training (5-day)**

This is a RAB accredited course that is necessary to become a RAB certified Lead EMS Auditor. This 36 hour program will cover all aspects of ISO 14001 and auditing protocol. The student will leave with a detailed understating of the standard, how to conduct EMS audits, and how to setup an auditing program. We will walk the student through a variety of auditing exercises and hands on workshops that will give the students confidence in their ability to conduct audits. Upon course completion and passing the exam the

student will receive a Lead Auditor Training certificate. This course is offered through our partner program.

**Internal Auditor Training (2-day)**

This program is designed for people who will conduct internal audits of their facility. The program will cover the standard, auditing protocols, and hands on auditing exercises. The auditor will leave the course with the ability to start doing internal audits.

Both of these programs are offered onsite and through our public course offerings

**Lead Auditor Training**

Onsite: From \$6,500  
 Individual: From \$1,075

**Internal Auditor Training**

Onsite From \$2,900  
 Individual: From \$699

**EHS Management Strategies, LLC**

EHS-MS offers high quality cost effective consulting services in the following areas:

- ◆ SPCC Certification and Planning
- ◆ Environmental Management Information Systems (EMIS) implementation and training
- ◆ RCRA Permitting and Corrective Action
- ◆ EHS Auditing
- ◆ EHS Compliance Planning and Training Development
- ◆ Sustainability Planning
- ◆ Environmental liability assessments and financial reporting (Sarbanes-Oxley Compliance)
- ◆ Site remediation technology and closure evaluations
- ◆ Integrated Contingency Planning—SPCC, Stormwater, RCRA, Risk Management Plans
- ◆ Hazardous Waste Management and Cost Minimization
- ◆ ISO 14001 / OHSAS 18001 Management Systems
- ◆ ASTM Phase I/ BEA / Due Diligence
- ◆ Process Safety Management (PSM) Tools
- ◆ Air Quality & Permitting
- ◆ Remediation Technologies (patented)
- ◆ Data Management & IT Tools

EHS specializes in delivering these services in a manner that integrates compliance into your business operations. Our compliance assessment services focus on best management practices as well as regulatory compliance. **Please consider us for your next consulting assignment.**



<b>EHS Compliance Programs</b>	<b>Cost</b>
<b>Environmental Compliance Assessment:</b> PME has developed a risk based approach to conducting environmental compliance assessments needed to reduce your risks of regulatory enforcement and to comply with your ISO 14001 EMS. This program includes a pre-audit assessment, 1 or 2 days onsite audit, and preparation of an audit report. This will include a review of the applicable air, water, and waste regulations. A draft assessment report will be issued with a detailed list of findings and finalized upon approval from the client.	<b>\$2,225 (1-day)</b> <b>\$2,995 (2-day)</b>
<b>DOT Training:</b> PME will deliver a one day DOT Hazardous Materials training program designed to meet the requirements for DOT training required every 3 years. This program will cover identification of hazardous materials, shipping papers, labeling & marking, security, and site safety. We will incorporate information for the specific materials managed at your plant. This program includes training documentation and testing as required. (up to 6 students).	<b>\$1,550</b>
<b>Hazard Communications and RCRA Training:</b> PME will conduct an onsite review of your operations, review the waste and chemical management program, and develop a site specific Hazard Communications and RCRA training program. We will provide an electronic copy of all training materials. We can also deliver the training .	<b>\$2,990</b> <b>\$975 (training)</b>
<b>Waste Management Plan:</b> PME will conduct an on-site review of your facilities waste and recycling programs. We will then develop a written plan for how these wastes are to be disposed of and recommended disposal facilities. We will look for opportunities to re-characterize waste and identify savings on waste disposal. The plan will identify the generated waste streams, record keeping, and training requirements. We will typically identify \$1,000's in annual waste reduction savings.	<b>\$3,345</b>
<b>Chemical Inventory and MSDS Review:</b> PME will spend a maximum of 2 days at your facility developing a detailed chemical inventory for your facility. This inventory will be summarized in an excel spread sheet. We will also verify that the facility had an MSDS for each material.	<b>\$2,445</b>
<b>ISO 14001 Internal Auditor Training</b> <sup>(2)</sup> : PME has developed an interactive and highly effective auditor training program. This program will provide a detailed overview of the ISO 14001 standard, the auditing process, ISO 19011 auditing guidance, and how to plan and conduct an internal audit. It includes many hands on exercises to re-enforce the auditing skills needed. (up to 6 students)	<b>\$2,950 (2-day)</b> <b>\$1,950 (1-day)</b>
<b>Internal EMS Audits:</b> PME help the facility to plan and perform ISO14001 internal audits of their environmental management system (EMS). This can include audit planning, records review, and completion of internal Audit. PME staff can provide checklist/audit plan templates or use the facility's.	<b>\$665/day</b>
<b>ISO 14001 or OHSAS 18001 QuickStart:</b> This is program designed for those getting ready to implement an ISO 14001 or OHSAS 18001 management system. PME will meet with plant management to identify the goals, help establish the implementation team, review of existing management systems, training for implementation team, and prepare a detailed implementation plan. This program will fully prepare any plant to begin implementation.	<b>\$2,900</b>
<b>Integrated Contingency Planning:</b> Many sites have multiple contingency plans required under various regulatory programs. EHS has developed this program to allow sites to develop a single integrated contingency plan (ICP). A PE will review the existing contingency plans and site operations to determine which regulations are applicable. EHS will then prepare a boiler plate ICP under the applicable regulatory programs and coordinate data collection with plant personnel and preparation of a draft ICP. Once the draft plan is completed by plant personnel, EHS will review the ICP, provide detailed list of discrepancies, and certify the final plan.	<b>\$3,200</b>
<b>In Plant Services:</b> Many times a plant EHS manager needs temporary help to get a project completed or EHS expertise to help resolve a compliance issue. PME will provide a professional to support your projects – permitting, EHS reporting, waste water optimization, EHS audits, site remediation, or any others.	<b>\$665/day</b>
<b>SPCC Review/Certification:</b> A PE will spend one day at your facility reviewing your updated SPCC plan and providing certification. Any discrepancies be discussed and PE will complete a final review and issue certification of your plan once the plan has been updated.	<b>\$1,250</b>

# Don't Reinvent the Wheel. Let us help you write your EHS programs!!



## Written Safety Plans Library Description

Priced Separately, this collection of Written Safety Plans would cost more than \$9,300.00. This complete library plan provides the user with 70 pre-written and ready to edit plans. (See list of safety topics included below) The library covers most of the OSHA safety spectrum ensuring your company is compliant in all aspects of your business. The Written Safety Plan is the documentation and record keeping part of any safety program. This is also the standard you should base your training program on.

*Keep in mind, according to OSHA, if your safety plan isn't in written*

- CW 100 - [Overall Company Safety Plan](#)
- CW 101 - [Hazard Communication Plan](#)
- CW 102 - [Blood Borne Pathogens Plan](#)
- CW 103 - [Eye/Face Protection Plan](#)
- CW 104 - [Lock-Out/Tag-Out Plan](#)
- CW 105 - [Respiratory Protection Plan](#)
- CW 106 - [Hearing Conservation Plan](#)
- CW 107 - [Permit Required Confined Space Plan](#)
- CW 108 - [Fire Prevention Plan](#)
- CW 109 - [Forklift Safety Plan](#)
- CW 110 - [HAZWOPER Plan](#)
- CW 111 - [Stairway/Ladder Safety Plan](#)
- CW 112 - [PPE and Job Hazard Analysis Plan](#)
- CW 113 - [Machine Guarding Plan](#)
- CW 114 - [Preparing for Work Emergencies](#)
- CW 115 - [Slings Safety Plan](#)
- CW 116 - [Electrical Safety Hazards Plan](#)
- CW 117 - [Hand and Power Tool Safety](#)
- CW 118 - [Occupational Ergonomics Plan](#)
- CW 119 - [Working in Hot Conditions Plan](#)
- CW 120 - [Slips, Trips, & Falls Safety Plan](#)
- CW 121 - [Accident Investigation Plan](#)
- CW 122 - [OSHA Recordkeeping Plan](#)
- CW 123 - [Office Safety Plan](#)
- CW 124 - [Process Safety Plan](#)
- CW 125 - [Welding Safety Plan](#)
- CW 126 - [Compressed Gas Safety Plan](#)
- CW 127 - [New Products, Equipment Plan](#)
- CW 128 - [Laboratory Safety Plan](#)
- CW 129 - [Spill Prevention, Plan \(SPCC\)](#)
- CW 130 - [Chemical Hygiene Plan](#)
- CW 131 - [Marking Industrial Hazards Plan](#)
- CW 132 - [Lead Safety Plan](#)
- CW 133 - [Crisis Management Plan](#)
- CW 134 - [Fall Protection Plan](#)
- CW 135 - [Trenching and Excavations Plan](#)
- CW 136 - [Americans with Disability \(ADA\) Plan](#)
- CW 137 - [Flammable and Combustible Liquids](#)
- CW 138 - [Medical Services and First Aid](#)
- CW 139 - [Contractor Safety Verification Plan](#)
- CW 140 - [Assured Equipment Grounding](#)
- CW 141 - [Facility Smoking Plan](#)
- CW 142 - [Servicing Single & Multi-piece Rim Wheels](#)
- CW 143 - [Facility Evacuation Plan](#)
- CW 144 - [Fire Extinguisher Plan](#)
- CW 145 - [Industrial Burn Safety](#)
- CW 146 - [Workplace Back Safety](#)
- CW 147 - [Drug Free Workplace Plan](#)
- CW 148 - [Light Duty Return To Work Plan](#)
- CW 149 - [Crane Safety Plan](#)
- CW 150 - [Supervisor Safety Plan](#)
- CW 151 - [Laser Safety Plan](#)
- CW 152 - [Safety Committee Plan](#)
- CW 153 - [Scaffolding Safety Plan](#)
- CW 154 - [Facility Physical Security Plan](#)
- CW 155 - [Radiation Safety for X-Ray Units](#)
- CW 156 - [MSDS Development Plan](#)
- CW 157 - [Hydrogen Sulfide Safety Plan](#)
- CW 158 - [Sand \(Abrasives\) Blasting Safety](#)
- CW 159 - [Sexual Harassment Plan](#)
- CW 160 - [Power Press Safety Plan](#)
- CW 161 - [Portable Ladder Safety Plan](#)
- CW 162 - [Working in Cold conditions Safety](#)
- CW 163 - [Violence in the Workplace Plan](#)
- CW 164 - [Media Relations Plan](#)
- CW 165 - [Benzene Safety Plan](#)
- CW 166 - [First Aid Response Plan](#)
- CW 167 - [Industrial Housekeeping Plan](#)
- CW 168 - [Chemical Labeling Plan](#)
- CW 169 - [Asbestos Safety Plan](#)
- CW 170 - [Loading Dock Safety Plan](#)
- CW 171 - [Eyewash Station Plan](#)
- CW 172 - [Mail Handling Safety and Security Plan](#)
- CW 173 - [Bomb Threat Response Plan](#)
- CW 174 - [Aerial Lift and Scissor Lift Safety Plan](#)
- CW 175 - [Threat Management Plan](#)
- CW 176 - [Behavior Based Safety Plan](#)
- CW 177 - [Electrical Safety for Unqualified Employees Plan](#)
- CW 178 - [Mold Safety Plan](#)
- CW 179 - [Hotwork Safety Plan](#)
- CW 180 - [Occupational Exposure to Cadmium Plan](#)

## Complete OSHA Safety Training Program Library Description

Priced separately this program would cost more than \$10,300. This program provides the user with over 60 standardized and ready to edit training programs. (See complete list of programs below) Each Training Program is an OSHA compliant program you use to train your employees within either a classroom setting or hands on demonstration. All the programs are fully editable and produced in Microsoft® PowerPoint. All of the programs have the same "look" and "format" so developing a standardized safety training program is a snap. Each program comes with a reproducible student handout, instructor evaluation, test and answer sheet, certificate on disk and the necessary training slides. The slides can be printed as filmsies, 35mm slides, projected from a PC, or used on a PC with MS-Slide Show.

**Note: written documentation and a recordkeeping plan must accompany any safety-training program.**