



EHS Compliance Update

December 2005

Inside this Issue

Lock Out / Tag Out Update	2
RCRA PCB Wastes	2
Annual Reporting	2
Calculating TPQ for EHS	3
Foundry Fined by OSHA	3
EHS Training Programs	4/5
EPA Revises Wastewater Treatment Exemptions	6
Brain Gym for Professionals	7/8
CRT's considered hazardous	9
Packaging ID Codes	10
RCRA Satellite Accumulation Regulations	10
Compliance Programs	11

See our new course offerings on Page 4. They include:

- ◆ Six Sigma
- ◆ Lean Manufacturing
- ◆ OSHA Regulations
- ◆ Process Mapping

Service Locations

- ⇒ Decatur, AL
- ⇒ Elgin, IL
- ⇒ Grand Rapids, MI
- ⇒ Traverse City, MI
- ⇒ Lansing, MI
- ⇒ Detroit, MI
- ⇒ Denver, CO
- ⇒ San Francisco, CA

EHS Management Strategies ends another Great Year of Business in 2005

EHS has enjoyed another great year of business and it is all thanks to great clients like you. We appreciated the opportunity to work with many new clients this year (**see page 3**). Our revenues were up 400%. In 2004 100% of our revenues were from training services and in 2005 the mix was 45% training services and 55% from consulting assignments.

In 2005 we added courses in OHSAS 18001 implementation, Advanced EMS Auditor, ISO9001/TS16949 and Total Waste (DOT/RCRA) programs. We have also formed an alliance with several software providers to help our clients optimize their compliance systems. The consulting assignments included compliance auditing, SPCC/PIPP/SWPP Plans, benchmarking studies, and permitting. We have also added another alliance partner to bring Six Sigma, Process Optimization, and Lean Manufacturing programs. We have also join forces with PM Environmental to expand our services to include site remediation and due diligence services (**see page 6**).

This has been a very exciting year and we look forward to working with you in 2006. Our success has been built on providing high quality services at the lowest possible costs. We will continue to strive to meet and exceed our client's expectations in 2006.

Thanks!!!

Please contact us at (616) 262-9780 or JimCharlesPE@charter.net

SARA Title III Facility Emergency Coordinator Notification [EPA 40 CFR 355.30(c)]

According to Section 303 of SARA Title III, if your facility is subject to the emergency planning requirements of SARA Title III in accordance with Section 302, then you must provide your local emergency planning committee (or LEPC) with the name and contact information for your facility's emergency coordinator. This emergency coordinator must then participate in the LEPC's emergency planning activities. If your emergency coordinator changes, you should update this notification within 90 days of the change.

This requirement is codified at 40 CFR 355.30(c). To understand whether or not your facility is subject to sections 302 and 303 of SARA, you must know what hazardous chemicals present at your facility trigger the thresholds for these notification requirements.

SPCC Reminder

**February 17, 2006 -
to amend an
existing SPCC
Plan**

**August 18, 2006 -
to implement the
Plan**

LOTO-What is required in the lockout/tagout program, and must this program be in writing?

The LOTO standard contains criteria for establishing an effective energy control program. Pursuant to §1910.147(c)(1), an energy control program, includes: energy control procedures, employee training, and periodic inspections, which jointly function to ensure that hazardous energy sources are isolated and rendered safe before, and while, any employee performs any servicing or maintenance on any machinery or piece of equipment. The LOTO standard does not require a written energy control program; however, the standard does have several requirements regarding documentation and certification of records:

Energy Control Procedure. Paragraph 1910.147(c)(4)(i) states that employers must **document** the procedures used to isolate from its energy source (s), and render inoperative any machine or equipment prior to servicing, maintenance, or repair. These procedures are necessary if energization, start up, or release of stored energy is possible and could injure workers. **(Continued on Page 8)**



EHS Management Strategies

is pleased to announce our strategic partnership with **Enviance**. The **Enviance System** is deployed at 750 facilities in over 55 companies and used by the most demanding Fortune 1000 companies and government organizations. Contact EHS for a demonstration of this powerful system free of charge at:

JimCharlesPE@Charter.net

"The **Enviance System** is the only system we found that had the flexibility to do whatever we needed. With other software packages, we would have needed to change our processes or customize the software - neither of which was a good option for us. With Enviance, we just set it up the way we needed and it worked right away across all 21 of our facilities."

Celia Bayless
VP, Environment, Health and
Safety
Fujicolor Processing

RCRA Regulation of PCB Wastes [RCRA 40 CFR 261.8]

According to [40 CFR 261.8](#), PCB-containing dielectric fluid, as well as electrical equipment containing such fluid, that is authorized for use and regulated under [40 CFR 761](#) and that is hazardous only because it fails the test for the Toxicity Characteristic for hazardous waste codes D018 through D043, is exempt from regulation under [40 CFR 261 through 265](#), and [40 CFR 268, 270](#), and [124](#). Such wastes are also exempt from the notification requirements of [RCRA Section 3010](#).

However, PCB-containing dielectric fluid that otherwise displays a characteristic (D001 - D017), would be subject to both RCRA hazardous waste and TSCA regulations.

Annual Environmental Reporting

You will soon begin collecting the information that you need to prepare your 2005 environmental reports. These will include SARA Tier II, Hazardous Waste, Air Emissions (MAERS), Toxic Release Inventory, and others. The time is right to evaluate your systems for collecting this information throughout the year and improve your data collection systems. Your operations may be simple enough that a few well developed spreadsheets can do the trick or may be complicated enough to warrant use of an Environmental Management Information System (EMIS) tool. An analysis of your data collection tools could save you 30% to 50% of the time in 2006. You can elect to do this review yourself, personnel from another facility, or hire a third party reviewer. We would suggest a person independent of the facility conduct the review. This could be an EHS manager from another facility within your company or you could agree to bring in an EHS manager from another company (you could then audit his site). The key is to get an independent set of eyes. You will be surprised at how much time you can save!!

Calculating the TPQ for Mixtures Containing Solid EHSs [EPA 40 CFR 355.30(e)(2)]

[40 CFR 355.30\(e\)\(2\)](#) specifies how to calculate threshold planning quantities (TPQs) when a solid extremely hazardous substance (EHS) is present in a mixture. Knowing the TPQ will help you determine if you must submit Tier II forms as well as determine if you are subject to sections 302 (facility notification) and 303 (emergency coordinator notification) of SARA Title III.

EHSs that are solids are subject to only one of the two TPQs on the EHS list (i.e., 500 versus 10,000 pounds). The lower TPQ is triggered in the following instances:

- ◆ Solid exists in powdered form with a particle size of less than 100 microns
- ◆ Solid is handled in molten or solution form
- ◆ Solid meets the criteria for a National Fire Protection Association (NFPA) rating of a 2, 3, or 4 for reactivity

This regulation goes on to include additional information for calculating TPQs in these particular cases.

To see the current list of EHSs and their corresponding TPQs, go to the [Title III List of Lists](#)

Foundry company hit with nearly \$118,000 in penalties

OSHA has cited Goldens' Foundry & Machine Company for exposing workers to safety and health hazards at its Columbus, Ga., manufacturing plant. The agency is proposing penalties totaling \$117,950.

The company received 59 serious citations for alleged safety and health violations observed during an April 2005 inspection.

OSHA cited 51 safety hazards that exposed workers to falls, amputations, electrocutions and "struck-by" accidents. The proposed penalties, which individually range from \$1,050 to \$3,500, totaled \$102,200. Hazards included a damaged hoisting crane; lack of required guards on machinery throughout the plant; unguarded floor openings; missing guardrails on stairways; defective tools; unmarked emergency routes and exit doors; electrical hazards; and failing to use "lockout-tagout" procedures to render machinery inoperable during maintenance or repair.

The company received eight citations, with proposed penalties totaling \$15,750, for exposing workers to health hazards. The cited hazards included permitting workers to smoke in flammable areas; storing flammable, corrosive chemicals in defective cabinets; failing to provide adequate eye protection, including readily accessible eye wash stations for employees working with chemicals; failing to properly label chemicals; and exposing workers to silica above the permissible exposure limit.

EHS Management Strategies Clients include:

- ◆ 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

EHS Partners with Rule Engineering in Denver, Colorado to delivery Environmental & Safety consulting services. This office has a strong construction safety group and OSHA VPP expertise. Let us show you our solutions based service delivery.

MANAGEMENT SYSTEMS

- ◆ Advanced EMS Auditing
- ◆ **ANSI Z10 OH&S Management System (new)**
- ◆ OHSAS 18001 OH&S Implementation
- ◆ ISO 14001/TS16949 Internal Auditor
- ◆ ISO 14001/RC14001 Implementation
- ◆ Lead Auditor Programs 14001/TS16949/ISO9000
- ◆ Process Mapping & Improvement
- ◆ Lean Practitioner Training
- ◆ Six Sigma Green Belt

EHS COMPLIANCE

- ◆ The “Complete” Waste Management Course
- ◆ Safety Regulations for the EHS professional
- ◆ Hazwoper 8hr, 24hr, 40hr Programs and Site Supervisor
- ◆ Ergonomic for Manufacturing (On-Line)
- ◆ Confined Space Entry
- ◆ Essentials of Fork Lift Training
- ◆ RCRA or Hazard Communications (Site Specific)

Management Systems

Lead Auditor Programs—TS 16949, ISO9000, ISO1400 (5 days): These are 5-day RAB accredited lead auditor program. Each program is 36 hours with a final exam, and qualifies the student to become RAB accredited auditors.

Advanced EMS Auditing (1-day): This is a one day program designed to give your existing auditors a good understanding of ISO 14001:2004 and key differences. We will review conformance scenarios designed to highlight key changes in the standard. We will also review the ISO 19011 guidance on EMS auditing.

ANSI Z10 or OHSAS 18001 Occupation Health & Safety Management System Implementation (2 days): This course will provide a detailed overview of either the **Z10** or OHSAS standard and how to implement an Health & Safety management system. Each student will leave with a good working knowledge of the standard and the tools needed to develop a H&S Management System.

Internal Auditor Training— TS16949, ISO 14001 or OHSAS 18001 (2 days): This is program is for anyone who wants to conduct internal audits. It will provide a detailed overview of the ISO14001 or 18001 standards and auditing techniques. This is a very “hands on” program filled with exercises.

ISO 14001 or RC14001 Implementation for Managers (2 days): This is a two day program designed to teach new managers or supervisors the requirements of their environmental management systems and how to implement ISO 14001 or RC 14001. The course provides a detailed understand of either standard, how to development the main elements and how to plan you implementation.

Process Mapping & Improvement (2 days): Process mapping is one of the fastest ways to lower errors, increase productivity, and improve customer service. Drawing on years of valuable, real-world experience across a variety of industries, our instructors teach attendees to map their business processes and identify critical areas for improvement. Process mapping allows you to analyze the way your organization really operates, identify opportunities for improvement, implement changes and increase customer satisfaction.

Six Sigma Green Belt Training (5 Days): Six Sigma Green Belts are a vital part of Six Sigma implementation at any organization. The five-day Six Sigma Green Belt training program is designed for employees of an organization who need to support Six Sigma Black Belt projects or conduct independent Six Sigma Green Belt projects.

Certified Lean Practitioner Training (4 days): This course is designed to provide the participants with a comprehensive introduction to Lean Enterprise, Six Sigma and ISO. They will also learn the LSI (Lean Sigma-ISO 9000) Deployment Model, Applied Tools and Analysis Techniques.

EHS Compliance

The “Complete” Waste Management Course (1 day): This program provide the training required under **DOT and RCRA** for hazardous materials and waste management. The DOT training will cover the requirements of Subpart H, §172.700-172.704. The RCRA training includes waste characterization and management, manifesting, record keeping, training, contingency planning, universal wastes, and biennial reporting. This training meets the annual RCRA training requirements.

Safety Regulations for the EHS professional (2-day): This two day program will provide the EHS professional with a good understanding of all major safety programs. This will include OSHA regulations, Fire Protection, Electrical Cords, Record-keeping, Medical and Exposure Records, Bloodborne Pathogens, Hazard Communications, Respirators for Healthcare & Industry, OSHA Inspections, Noise Exposure, PPE, Permit-Required Confined Space, Lockout/Tagout, Forklifts, Machine Guarding, Electrical Safety, HAZWOPER.

Forklift Safety (1-day): This one-day course offers the most complete general industry forklift training program ever created. You’ll learn everything you need to know to certify your forklift operators in one easy-to-understand, comprehensive program. Our training system covers every forklift-related OSHA regulation with video and computer-generated examples. In addition, you will receive a complete training kit, and the Trainer’s Instruction Manual includes references to OSHA regulations, evaluation forms, and practice drills.

Hazwoper 8hr, 24hr, and 40 hr Courses: These programs meet the requirements for 29 CFR1910.120 for initial and annual hazardous operations training. We also offer a 1-day Site Supervisors training.

Training Schedule Public Courses

Course	Cost	January	February	March	April
ANSI Z10 OH&S Management System Implementation (new)	\$659	Atlanta, GA		Detroit, MI	Chicago, IL Orlando, FL
ISO 14001 Internal Auditor	\$699	Grand Rapids, MI	Indianapolis, IN	Chicago, IL	Orlando, FL
Advanced EMS Auditing (ISO 14001:2004)	\$499		Detroit, MI	Chicago, IL	Grand Rapids, MI
ISO 14001 Implementation	\$699		Lansing, MI		Orlando, FL
OSHAS 18000 Overview and Implementation	\$499	Chicago, IL	Cleveland, OH	Detroit, MI St. Louis, MO	Orlando, FL
The "Complete" Waste Management Course (DOT/RCRA)	\$499		Grand Rapids, MI	Detroit, MI Chicago, IL	Cleveland, OH
ISO14001 Lead Auditor Training	\$1,575*				Lansing, MI
TS16949 Lead Auditor Training	\$1,975*			Lansing, MI	
TS16949 Internal Auditor	\$995*		Grand Rapids, MI		Chicago, IL
Process Mapping	\$895	San Francisco, CA	Nashville, TN	Marietta, GA	Southbury, CT
Lean Practitioner	\$1,295	Denver, CO	Southbury, CT	Marietta, GA	
Six Sigma Green Belt	\$2,295	Orlando, FL	San Francisco, CA	Southbury, CT	Chicago, IL
RC14001/RCMS Implementation	\$795*			Detroit, MI	Cincinnati, OH
Safety Regulations for EHS Professionals	\$495	Detroit, MI Long Beach, CA	Chicago, IL Charlotte, NC	St. Louis, MO Hartford, CT	Grand Rapids, MI
Essentials of Fork Lift Training	\$495	Chicago, IL Indianapolis, IN	Cleveland, OH	St. Louis, MO Hartford, CT	Grand Rapids, MI
Hazwoper Refresher (8 hr) (Many more locations and dates please contact EHS plus our 24 hr and 40 hr programs)	\$125	Indianapolis, IN Detroit, MI Chicago, IL St. Louis, MO Cincinnati, OH Madison, WI	Indianapolis, IN Detroit, MI Chicago, IL Lansing, MI Madison, WI Philadelphia, PA	Indianapolis, IN Detroit, MI Chicago, IL Lansing, MI Philadelphia, PA Denver, CO	Indianapolis, IN Detroit, MI Chicago, IL St. Louis, MO Madison, WI Philadelphia, PA
Confined Space	\$299				Chicago, IL
Site Supervisor	\$195			Detroit, MI	



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

To get specific dates and to register contact JimCharlesPE@charter.net. (*) 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.

EHS partners with PM Environmental to provide full service Site Remediation Services (ISO9001 Certified!!!)

EHS is now working with PM Environmental to provide cost effective site remediation services. PM is committed to providing HIGH quality services and has certified their operations under ISO9001. This certification documents their quality systems and ensures that high quality data is collected to support their projects.

PM's services include:

- ◆ Phase I/II —Environmental Site Assessments
- ◆ UST Site Management
- ◆ Air Quality Services
- ◆ Remedial Feasibility Studies and Corrective Action
- ◆ Brownfield Redevelopment Planning
- ◆ Regulatory Compliance Assessments
- ◆ Indoor Air Quality Evaluations
- ◆ Stormwater Management
- ◆ Field Sampling & Geoprobe Operations
- ◆ Mold Inspections and Evaluations
- ◆ Baseline Environmental Assessments (BEA)

Www.PMenv.com

With almost 50 people located in 4 offices in Michigan and Alabama, PM can cost effectively execute site remediation and compliance related projects. They quickly execute due diligence projects to meet the clients schedule and quality expectations.

PM Environmental Successfully Completes 60 site Major Oil Due Diligence Projects on Fast Track

PME recently completed two multi-site due diligence projects each involving the acquisition of 30 major Oil gasoline stations/C-stores in the SE Michigan area. The projects were performed concurrently and demonstrate PME's specific competence with multi-site complex due diligence projects. PME's depth in our due diligence staff and systematic approach to such projects allowed the completion of the projects within the tight time frames required by the clients.

Steve Price is PME's Vice President of Due Diligence services. Mr. Price has 8 years experience in the Vice President of Environmental Risk Management for Standard Federal (now LaSalle) Bank. He has an in-depth understanding the environmental issues associated with the commercial loan process and helps clients get deals done.

EPA Revises the Wastewater Treatment Exemptions for Hazardous Waste Mixtures

On October 04, 2005 [Federal Register (Volume 70, Number 191)], EPA published its final rule regarding the addition of benzene and 2-ethoxyethanol to the list of solvents whose mixtures with wastewaters are exempted from the definition of hazardous waste under the Resource Conservation and Recovery Act. The scrubber waters derived-from the combustion of any of the exempted solvents also are included in the exemption. In addition, the Agency is revising the rule by adding an option to allow generators to directly measure solvent chemical levels at the headworks of the wastewater treatment system to determine whether the wastewater mixture is exempt from the definition of hazardous waste. Finally, the Agency is extending the eligibility for the de minimis exemption to other listed hazardous wastes (beyond discarded commercial chemical products) and to non-manufacturing facilities. This final rule is effective on November 3, 2005.

See details at: <http://edocket.access.gpo.gov/2005/05-19841.htm>

Brain Gym® for Professionals (reprint by popular demand)

Would you enjoy having greater enjoyment, efficiency and success in the workplace? Do you every feel tired after lunch or have trouble paying attention during meetings? If so, this article may provide some helpful ways to improve your PERFORMANCE!

With Brain Gym® exercises people report heightened energy and vitality in their jobs. They claim improved concentration and productivity with the use of computers, machines, development, management and increased sales. Reports indicate improvement in the ability to communicate and support teamwork. They feel they are more organized and have better comprehension of concepts and reading materials. Brian Gym is exercises that help optimize the performance of your brain.

The work environment presents challenges to the worker such as: fluorescent lights, computer screen emanations and work-flow overloads. Some individuals are extremely sensitive to these influences. Each year, billions of dollars are spent by industry on ergonomics to design workplaces that are safe from work-related injuries and to make them conducive to fast, economical production. But technology can address only a portion of the problem, because health, safety and productivity ultimately depend upon the individual. We can minimize stress in the work environment and gain a sense of personal pride by raising the quality of our achievements.

First of all, we need to replenish our bodies daily with water. Next, Brain Gym movements serve as the kind of easy and effective tools to optimize our performance and on-the-job satisfaction. So try these exercises first thing in the morning, after lunch or any time you are feeling unfocused. They are surprisingly simple, but very effective!

- **Drink Water**

As Carla Hannaford says, "Water comprises more of the brain (with estimates of 90%) than of any other organ of the body." Having students drink some water before and during class can help "grease the wheel". Drinking water is very important before any stressful situation - tests! - as we tend to perspire under stress, and de-hydration can effect our concentration negatively.

- **"Brain Buttons"**

This exercise helps improve blood flow to the brain to "switch on" the entire brain before a lesson begins. The increased blood flow helps improve concentration skills required for reading, writing, etc.

- o Put one hand so that there is as wide a space as possible between the thumb and index finger.
- o Place your index and thumb into the slight indentations below the collar bone on each side of the sternum. Press lightly in a pulsing manner.
- o At the same time put the other hand over the navel area of the stomach. Gently press on these points for about 2 minutes.

(Continued on Page 8)

Brian Gym® for Professionals.

Step 1—Drink Water

Step 2—Brain Buttons



Step 3—Cross Crawl



Step 4—Hook-ups



Brain Gym® for Professionals

"Cross Crawl"

This exercise helps coordinate right and left brain by exercising the information flow between the two hemispheres. It is useful for spelling, writing, listening, reading and comprehension.

- o Stand or sit. Put the right hand across the body to the left knee as you raise it, and then do the same thing for the left hand on the right knee just as if you were marching.
- o Just do this either sitting or standing for about 2 minutes.

"Hook Ups"

This works well for nerves before a test or special event such as making a speech. Any situation which will cause nervousness calls for a few "hook ups" to calm the mind and improve concentration.

- o Stand or sit. Cross the right leg over the left at the ankles.
- o Take your right wrist and cross it over the left wrist and link up the fingers so that the right wrist is on top.
- o Bend the elbows out and gently turn the fingers in towards the body until they rest on the sternum (breast bone) in the center of the chest. Stay in this position.
- o Keep the ankles crossed and the wrists crossed and then breathe evenly in this position for a few minutes. You will be noticeably calmer after that time.

You will be surprised at how effective these exercises will improve your performance. Try doing these at your next business meeting.

This article was written by Kelley Charles a Health Kinesiologist specializing in the use of natural therapies that promote good health and well being. She provides group training sessions and consults with patients in her office in Rockford, Michigan. For any information on her services and programs contact her at Jimprjayp@chartermi.net or (616) 866-8787.

(Brain Gym® is a registered trademark of Brain Gym® International / Educational Kinesiology Foundation)

Why Recycle??

- ◆ Recycling one ton of cardboard saves over 9 cubic yards of landfill space.
- ◆ The largest single source of waste paper collected for recycling is corrugated boxes.
- ◆ Americans throw away enough wood and paper every year to heat five million homes for 200 years.

LOTO Program (con't)

Periodic Inspection. Paragraph 1910.147(c)(6)(ii) requires employees to **certify** the inspection by documenting the date of the inspection and identifying the machine or equipment inspected and the employee who performed the inspection. The inspection records provide employers with assurance that employees can safely service, maintain, and repair machines and equipment covered by the Standard.

Training. Paragraph (c)(7)(iv) provides that employers must **certify** that individual employees completed the required training and that this training is current. This training must be documented.

CRTs considered hazardous waste?

Cathode ray tubes (CRTs) may exhibit the toxicity characteristic for lead. Colored CRT glass generated through EPA's toxicity characteristic leaching procedure (TCLP) was 22.2 milligrams per liter (mg/L). This level is considerably above the toxicity characteristic regulatory level of 5 milligrams per liter that is used to classify lead-containing wastes as hazardous. For monochrome CRTs, the average lead leachate concentration was 0.03 mg/L.

Most CRTs (especially color monitors for computers or televisions) are considered hazardous under federal and state regulations because of the presence of lead. To encourage more collection and recycling of CRTs, EPA is proposing rulemaking changes to streamline existing federal management requirements which currently add expense and paperwork to CRT recycling. EPA has already made similar rule changes to encourage the recycling of certain batteries, thermostats, hazardous waste lamps, and pesticides. Several states currently have or are considering changes to do the same for CRTs. On June 12, 2002, EPA proposed a rule to exclude CRTs from the definition of solid waste if sent for recycling. The agency is encouraging states to take an approach consistent with the proposed rule. At present, Maine, Michigan, New Hampshire and Rhode Island have added CRTs to their universal waste programs.

A business that sends electronics to a reseller for potential reuse is not a RCRA generator. Repairing electronics before resale is not considered reclamation and such repair and replacement activities do not constitute waste management. Used electronics sent to a recycler could, under certain circumstances, be considered spent materials undergoing reclamation and could therefore be solid wastes. To determine how electronics must be managed in particular situations, users and recyclers of electronics should check with their implementing agencies to see which, if any, RCRA Subtitle C requirements apply when used electronics are sent toward specific recycling pathways.

JOB HAZARD ANALYSIS

A job hazard analysis is an exercise in detective work. The goal is to discover the following:

- *What can go wrong?*
- *How could it arise?*
- *What are other contributing factors?*
- *How likely is it that the hazard will occur?*
- *What are the consequences?*

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These are great for any occasion. Tell Sue EHS sent you. Just in time for the Holidays!!!

EHS Consulting Services

EHS offers high quality cost effective consulting services in the following areas (Nationwide):

- ◆ SPCC Certification and Planning
- ◆ Environmental Management Information Systems (EMIS) implementation and training
- ◆ Safety Management, Workman's Comp and Insurance Optimization
- ◆ EHS Auditing
- ◆ EHS Compliance Planning and Training Development
- ◆ Sustainability Planning
- ◆ Environmental liability assessments and financial reporting
- ◆ Site remediation technology and closure evaluations
- ◆ Integrated Contingency Planning—SPCC, Stormwater, RCRA
- ◆ Hazardous Waste Management and Cost Minimization
- ◆ ISO 14001 / OHSAS 18001 Management Systems / OSHA VPP
- ◆ ASTM Phase I/ BEA / Due Diligence

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.**

To subscribe to this newsletter or information on any of these services contact:

**EHS Management Strategies
Suite 100
5605 Kies St
Rockford, MI 49341
(616) 262-9780—Office
(616) 866-9152—HQ**

JimCharlesPE@charter.net

Packaging ID Codes—how do I read them?

Example: UN 1A1/Y1.4/150/83/USA/XYZ

- ◆ 1A1: Type of packaging. 1=Drum A=Steel 1=Non removable head drum
- ◆ Y Packing Group Designation X = PG I, II, III Y = PG II, III Z= PG III
- ◆ 1.4 Gross mass or Specific Gravity. Max specific gravity of product which can be carried by package
- ◆ 150 Hydrostatic Test Pressure. S = combination packaging # = kilopascals test pressure rating
- ◆ 83/USA/XYZ Year of Mfg/Country of Mfg/Mfg individual ID code

RCRA— Satellite Accumulation Area Regulations?

The satellite accumulation provisions allow for reduced requirements for hazardous waste accumulated in containers at or near any point of generation (§262.34(c)). A generator may accumulate up to fifty-five gallons of hazardous waste or one quart of acutely hazardous waste at each satellite accumulation area if it is under the control of the person operating the process that generates the waste (§262.34(c)). Limited standards, such as labeling, keeping the containers closed and maintaining containers in good condition, apply to satellite areas (§262.34(c)(1)(i) and (ii)). Once the generator exceeds the volume limits, the excess waste must be dated and moved within three days to the central accumulation area. At the central accumulation area, the waste must be managed in accordance with the fuller hazardous waste accumulation standards in §262.34

**EHS Partners with
AMERICAN REMEDIATION**
Through this partnership
we can bring you
innovative and patented
REMEDIATION
Technologies and Site
Closure Services.

- ◆ **Product Recovery**
[\(MAV Systems™\)](#)
- ◆ **Soil Remediation**
[PER-PETUAL System™](#)
- ◆ **Groundwater Cleanup**
[\(E-DOT™\)](#)

Contact us at
JimCharlesPE@charet.net
to find out how these
systems can save
significant costs for
site clean-up.

Remediation using good old American ingenuity, new ideas, and experience.
Three Highly Effective & Low Cost Remediation Technologies

PER-PETUAL SYSTEMS
Patent # 6,517,388

MAV SYSTEMS
Patent # 6,517,388

E-DOT SYSTEMS
Patent # 6,517,388

How Cost Effective are these systems?

	Average Installation Capital Cost	Time Average Operational Cost	Estimated Average Clean-up
E-DOT System	\$ 25,000 - \$ 35,000	\$ 250 / month	2 years
PER-PETUAL System	\$ 28,000 - \$ 38,000	\$ 1,000 / month	1.5 years
MAV System	\$ 28,000 - \$ 38,000	\$ 180 / hour	100 - 150 hours

Compliance Programs	Cost ⁽¹⁾
DOT Training ⁽²⁾: EHS 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.	\$1,599
Advanced EMS Auditor Training ⁽²⁾: EHS will deliver a one day training program to your internal auditors to provide an update of the ISO 14001:2004 Standard and review of advanced auditing materials. The last portion of the program will be evaluating conformance scenarios relative to the revised standard.	\$1,599
Environmental Compliance Assessment: EHS 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. A draft assessment report will be issued with a detailed list of findings and finalized upon approval from the client.	\$3,400 (1-day) \$4,600 (2-day)
IT EHS Compliance Assessment: EHS has developed this program for companies looking for ways to stream line their EHS compliance systems using IT Tools. This program includes an initial review of your EHS programs to determine data flow and reporting needs. We will then meet to review options for optimizing your systems and reducing the man-hours needed to maintain compliance and develop recommendations for your site.	\$1,699
ISO 14001 Internal Auditor Training ⁽²⁾: EHS 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	\$3,500 \$3,200
ISO 14001:2004 JumpStart: This is a one day program design for those that need to upgrade their EMS to meet the ISO 14001:2004 standard. This program includes 2-hour training sessions for the plant's EMS team on the revised standard, review of the EMS, and development of detailed action plan. The action plan will	\$1,599
ISO 14001 or OHSAS 18001 QuickStart: This is program designed for those getting ready to implement an ISO 14001 or OHSAS 18001 management system. EHS will meet with plant management to identify the goals, help establish the implementation team, review of existing management systems, training for imple-	\$3,500 \$2,900
Integrated Contingency Planning: 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	\$3,450 \$3,200
In Plant Services: Many times a plant EHS manager needs temporary help to get a project completed or EHS expertise to help resolve a compliance issue. EHS will provide a senior level professional to support your projects – permitting, EHS reporting, waste water optimization, site remediation, or any others.	\$599/day \$499/day
SPCC Upgrade Program: This is a two day program designed to update and certify your existing SPCC plan to meet the requirements under the revised regulations. A professional engineer will spend two days at your location to complete the following tasks – review your existing SPCC Plan, verify current oil/chemical management procedures, identify plan updates, development of a detailed action plan, and presentation of needed changes to plant staff. This program includes a 1-1/2 hour presentation to plant personnel on the regulation changes and certification of the updated plan. The second day will be spent developing a detailed action plan that includes all changes needed, assigning responsibility, and a schedule for completion.	\$2,400 \$1,799
SPCC Review/Certification: 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.	\$1,199

(1) The above pricing is all inclusive plus travel costs. Travel time is billed one-way at \$40/hour plus expenses. Pricing is based on pre-payment of services and can be made using a procurement or credit card, or check.

(2) Training courses provide training materials and documentation for up to 8 people. Additional students billed at \$200.

(3) **DISCOUNTED** pricing for work booked in November, and December 2005.