



EHS Compliance Update

August 2005

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AIR—Improvements to Permitting Program

EPA responded on June 6, 2005 to petitions for reconsideration from a number of stakeholders on the Equipment Replacement Provision (ERP) of the Agency's New Source Review (NSR) permitting program. After carefully considering the comments received during the reconsideration process, EPA determined that the ERP should be maintained as adopted in 2003.

EPA continues to believe that the October 2003 ERP rulemaking is fully justified and will provide much needed clarification to the NSR program while still ensuring environmental protection. The ERP offers certainty for industrial facilities by clearly spelling out that the NSR program should not stand as a barrier to equipment replacement activities needed to assure the safe, efficient, and reliable operation of manufacturing facilities.

The ERP, in conjunction with other programs such as the Clean Air Interstate Rule, the Acid Rain Program and the National Ambient Air Quality Standards, preserves public health protections provided by the Clean Air Act through the NSR program. Under the ERP facilities cannot increase their emissions past their current Clean Air Act limits.

For additional information: <http://www.epa.gov/nsr>.

EHS Management Strategies Management Systems

- ◆ Six Sigma Training
- ◆ OHSAS 18001
- ◆ ISO 14001
- ◆ IT Solutions/EMIS

EHS Training

- ◆ The "Complete" Waste Management Course
- ◆ Environmental Compliance for EHS Managers
- ◆ Hazwoper 8hr and 40hr
- ◆ Confined Space
- ◆ Site Supervisors

EHS Consulting

- ◆ Web-based Compliance
- ◆ EHS Metrics & Reporting
- ◆ OSHA -VPP
- ◆ SPCC / SWPPP
- ◆ EHS Audits
- ◆ Air Quality
- ◆ RCRA Permitting
- ◆ Liability Assessment & Sarbanes Oxley Reporting
- ◆ Brownfield Development
- ◆ ASTM Phase I / BEA's

Optimizing Internal EMS Audit programs

Over time EMS audit programs can lose their effectiveness and become nothing but a paper chase that simply "answers the mail" to maintain your registration. Sure, during your surveillance audits your registrar finds your program sufficient, but are you gaining any real value from the hours and \$\$\$\$ spent on conducting internal audits? Your internal audit program should be a major driver of the continuous improvement process. Here are a few suggestions:

- 1) **Build an Internal Audit Team:** Your internal EMS auditors should feel like they are part of an exclusive team. The team should get together on a regular basis to discuss issues that arise during audits, successes, and challenges. The audit team should also review their findings so that the entire team gets an understanding of the EMS. You may wish to have a monthly auditor luncheon and on a quarterly basis have a formal audit program review. Encourage auditors to use each other as resources while conducting audits. **(Continued on Page 2)**

**SPCC plans must be amended by:
August 17, 2005
Are you ready?**

“With its combination of extensive domain expertise in the environmental compliance arena and demonstrated technology, Enviance has produced what we believe is the industry’s leading TRI reporting technology. Our use of the system has saved us thousands of hours of time”

Aldo Morell
Director of Safety, Health and Environment
DuPont



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

EPA Delete Methyl Ethyl Ketone (MEK) From the TRI List

In the June 30, 2005 Federal Register (Volume 70, Number 125), EPA amended its regulations to delete methyl ethyl ketone (MEK) from the list of chemicals subject to reporting under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and section 6607 of the Pollution Prevention Act of 1990 (PPA). This action was taken to comply with a DC Circuit decision and order requiring the Agency to delete MEK. Upon promulgation of this rule, facilities will no longer be required under EPCRA section 313 to report releases of and other waste management information on MEK, including those that occurred during the 2004 reporting year. This final rule is effective on June 30, 2005.

Optimizing Internal EMS Audit programs (Con't)

- 2) **Keep your Auditors fresh:** After 2 to 3 years you should start to bring new auditors into your program. This may happen by natural attrition but by integrating new auditors into your program you will stop from falling into a rut and seeing the same findings again and again. New auditors will bring fresh ideas and perspective that result in improvement of your EMS.
- 3) **Don't forget the Interviews:** As many audit programs mature the auditors tend to do fewer and fewer interviews. Interviews are an excellent way to gauge the effectiveness of your EMS and keep the EMS fresh in the minds of employees. The more your employees are thinking about EMS issues the better your system will enhance environmental performance. Be sure that your audit checklists include people to interview and typical interview questions.
- 4) **Periodic Auditor training:** Every year or 2 years you should conduct periodic refresher training of your auditors. This should be a 1/2 to 1 day review of your EMS, the auditing program and audit process. Typical conformance scenarios could be review as a team and if you are updating your EMS to the new ISO 14001:2004 standard the auditors need this refresher training.
- 5) **Best Management Practices:** Remember internal EMS audits are not only about finding non-conformances. Remind your auditors that they are a fresh set of eyes review processes that people in the department see every day. They should be encouraged to note "opportunities for improvement" as they conduct the audits.

These are a few suggestions for keeping your EMS internal audits alive and driving continuous improvement at your facility. Remember your facility spends 100's of hours doing and reviewing the audit program. It is important that management see the return on investment for your internal audit program.

Article by: James Charles, PE, Senior ISO Consultant. Mr. Charles has helped many sites achieve ISO 14001 certification and trained over 100 auditors. He can be reached at JimCharlesPE@charter.net with any questions.

EPA Withdraws Direct Final Rule on NESHAP for Miscellaneous Coating Manufacturing

On July 6, 2005, the EPA announced its intent to withdraw direct final amendments to the NESHAP for Miscellaneous Coating Manufacturing. The amendments were issued as a direct final rule. Because an adverse comment was received on one provision, the EPA was compelled to withdraw the corresponding parts of the direct final rule. On May 13, 2005, the agency issued a parallel proposed rule which the EPA does when it issues a direct final rule in the event it receives adverse comment. The agency intends to address the adverse comments in the final action that will be taken in response to the proposed rule. The remaining provisions published on May 13, 2005, and issued under the direct final rule are effective **July 12, 2005**.

EHS Partners with Rule Engineering in Denver, Colorado to delivery Environmental & Safety consulting services. Let us show you our solutions based service delivery.

What is the RoHS Directive? (European Union)

The RoHS Directive is properly known as the Directive of the European Parliament on "[The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment](#)". It establishes limits for the content of six types of hazardous material in electrical and electronic equipment placed on the market in Europe after July 1, 2006.

Q : What are the six substances?

A: The substances are lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, and polybrominated diphenyl ethers. This includes both metals and compounds of lead, cadmium and mercury. The RoHS Directive sets maximum concentration levels allowable of these substances in the "homogenous materials" of electrical and electronic equipment covered by the legislation. The proposed maximum concentration levels in homogenous materials for lead, mercury, hexavalent chromium, polybrominated biphenyls, and polybrominated diphenyl ethers is 0.1 percent by weight, and 0.01 percent by weight for cadmium.

EPA Modifies the Toxics Release Inventory Reporting Forms

In the July 12, 2005 Federal Register (Volume 70, Number 132) issued a final rule to simplify the TRI reporting requirements by removing some data elements from the Form R and Form A Certification Statement that can be obtained from other EPA information collection databases, streamlining other TRI data elements through range codes and a reduced number of reporting codes, and eliminating a few data elements from the Form R. This rule also makes two technical corrections to the regulations to provide corrected contact information and to remove an outdated description of a pollution prevention data element. The stated purpose of the rule is to improve reporting efficiency and effectiveness, reduce burden, and promote data reliability and consistency across Agency programs. This rule is effective on September 12, 2005. The first reports with the revised reporting requirements will be due on or before July 1, 2006, for reporting year (i.e., calendar year) 2005

EHS Management Strategies Clients include:

- ◆ Alticor
- ◆ Delphi
- ◆ 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

How can I find software to calculate storage tank emissions? While the TANKS software has been around for quite a while, it is hidden deep within EPA's website. Go to <http://www.epa.gov/ttn/chief/software/tanks/index.html>; you'll find it there along with a user's manual and a very comprehensive FAQ.

Take notice, however, of the recent compatibility problems that Version 4.09b has had with Microsoft Access XP.

MANAGEMENT SYSTEMS

- ◆ **Advanced EMS Auditing**
- ◆ **Six Sigma Programs**
- ◆ **OHSAS 18001 OH&S Implementation**
- ◆ **ISO 14001 Internal Auditor**
- ◆ **ISO 14001 for New Managers**
- ◆ **ISO 14001 Implementation**

ENVIRONMENTAL COMPLIANCE

- ◆ **The “Complete” Waste Management Course**
- ◆ **Environmental Compliance for EHS Managers**
- ◆ **Advanced RCRA Course**

OSHA COMPLIANCE

- ◆ **Hazwoper 8hr and 40 hr Programs**
 - ◆ **Site Supervisor**
 - ◆ **Confined Space Entry**
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Management Systems

Advanced EMS Auditing (1 day): This is a one day program designed to give your existing auditors a good understanding of the 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.

OHSAS 18001 Implementation (1 day): This course will provide a detailed overview of the OHSAS standard and how to implement an OHSAS Health & Safety management system. Each student will leave with a good working knowledge of the standard and the tools needed to develop an HSMS.

Internal Auditor Training—ISO 14001 or OHSAS 18001 (2 day): 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 for Managers (1 day): This is a one day program designed to teach new managers or supervisors the requirements of their environmental management systems. The course will focus on the standard and provide the new manager with a good understanding of the operating requirements and their responsibilities.

ISO 14001 Implementation (1 day): This is a one day program designed to train facilities how to implement an ISO 14001 compliant environmental EMS. You will get a good understanding of the ISO 14001 standard, how to plan an implementation, and development of major EMS components.

Six Sigma Programs: EHS offers the following Six Sigma training program; Executive Leadership (1 day), Champion (3 days), Green Belt (5 days) and specialized Black Belt training (24 days). Other programs include Six Sigma Lean Manufacturing, Transactional Lean, and other Six Sigma tools.

Environmental 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.

Environmental Compliance for EHS Managers (1 day): This program provides a good overview of the environmental regulations that apply to industrial and manufacturing operations. This course is ideal for the new EHS manager or anyone that needs a good understanding of environmental regulations. It will cover Waste Management (RCRA & non-hazardous), Water Discharge (NDPES & POTW), Emergency Preparedness (SPCC, Stormwater), and EHS Training requirements.

Advanced RCRA Course (1 day): This is a must for all EHS managers. After a brief review of the RCRA regulations this course will get into LDR requirements, waste delisting, waste exemptions, TSD permitting and closures, and RCRA corrective action.

OSHA Compliance

Hazwoper 8hr, 24hr, and 40 hr Courses: These programs meet the requirements for 29 CFR1910.120 for initial and annual hazardous operations training.

Confined Space (1 day): This course fulfills the classroom requirements of 29 CFR 1910.146 for Confined Space Entry.

OSHA Site Supervisor (1 day): This course meets OSHA training requirements for supervisors and managers involved in the management and administration of hazardous waste site activities. Per 29 CFR 1910.120, each site must have a Supervisor who has received an additional 8 hours of training.

Training Schedule Public Courses					
Course	Cost	August	September	October	November
ISO 14001 Internal Auditor	\$699 \$599	St. Louis, MO Indianapolis, IN	Grand Rapids, MI Detroit, MI Chicago, IL Columbus, OH	Kansas City, MO Louisville, KY Atlanta, GA	Huston, TX Knoxville, TN Greenville, SC Pittsburg, PA
Advanced EMS Auditing	\$459 \$399	Grand Rapids, MI Detroit, MI Chicago, IL St. Louis, MO Indianapolis, IN	Columbus, OH		Huston, TX Knoxville, TN Greenville, SC Pittsburg, PA Columbus, OH
ISO 14001 for Managers	\$459 \$399		Orlando, FL Indianapolis, IN	Grand Rapids, MI Minneapolis, MN Milwaukee, WI	Chicago, IL Detroit, MI St. Louis, MO
ISO 14001 Implementation	\$459 \$399		Orlando, FL Indianapolis, IN	Grand Rapids, MI Minneapolis, MN Milwaukee, WI	Chicago, IL Detroit, MI St. Louis, MO
OSHAS 18000 Overview and Implementation	\$499 \$459		Chicago, IL Detroit, MI Columbus, OH Atlanta, GA	St. Louis, MO Philadelphia, PA Louisville, KY	Denver, CO Orlando, FL
The "Complete" Waste Management Course	\$499	Grand Rapids, MI	Detroit, MI Indianapolis, IN	Chicago, IL Grand Rapids, MI	
Environmental Compliance for EHS Managers	\$499			Chicago, IL	Detroit, MI
Advanced RCRA Course	\$499			Chicago, IL	Detroit, MI
Six Sigma Executive Leadership Overview	\$750	New York, NY	Chicago, IL		
Six Sigma Champion Training	\$2,950			Columbus, OH	
Six Sigma Green Belt	\$5,950	Niagara Falls			Phoenix, AZ
Hazwoper Refresher (8 hr) (Many more locations and dates please contact EHS plus our 40 hr programs)	\$125	Indianapolis, IN Detroit, MI Chicago, IL Lansing, MI Philadelphia, PA Denver, CO	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 St. Louis, MO Madison, WI Philadelphia, PA
Confined Space	\$299	Indianapolis, IN	Chicago, IL	Detroit, MI	Hartford, CT
Site Supervisor	\$195			Oakland, CA	Denver, CO

To get specific dates and to register contact JimCharlesPE@aol.com

Don't see your location contact us!!! We can provide these programs at your location with as few as 6 people. See www.EHStraining.ZoomShare.com for current training schedule.

EHS Management Services Training Schedule

Advanced EMS Auditing: This is a one day program designed to refresh your existing auditors and get them up to speed on ISO 14001:2004. We will provide a detailed review of the changes in the ISO 14001:2004 revisions, review the ISO 19011 guidance on environmental & quality auditing process, and team building exercises on conformance scenarios focused on the new standard. This program will reinvigorate your auditors and facilitate discussion on conformance issues and auditing in general. **Cost: \$459 ~~\$399~~.**

Grand Rapids, MI August 23rd	St. Louis, MO August 18th
Detroit, MI August 24th	Columbus, OH September 13th
Chicago, IL August 19th	Indianapolis, IN August 29th

ISO 14001 Internal Auditing: 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 hands on exercises to reinforce the auditing skills needed.

Cost: \$699 ~~\$649~~.

Grand Rapids, MI Sept. 19th & 20th	St. Louis, MO August 25th & 26th
Detroit, MI September 27th & 28th	Columbus, OH September 14th & 15th
Chicago, IL September 21st & 22nd	Indianapolis, IN October 4th & 5th

OHSAS 18001 Implementation: In this one-day program you will gain a detailed understanding of OHSAS 18001 and how to put together an OH&S management system that can lead to certification. The course will include the development of OHSAS 18001, detailed review of the standard, benefits of a certified management system, and how to integrate this into your environmental management system. You will leave the course with the ability to determine if OHSAS 18001 certification is right for your organization and how to plan an implementation.

Cost: \$499 ~~\$459~~

Chicago, IL September 23rd	Detroit, MI September 16th
Columbus, OH September 12th	Atlanta, GA September 30th

The "Complete" Waste Management Course: This program provides 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. **Cost: \$499 ~~\$459~~**

Toledo, OH September 9th	St. Louis, MO September 29th
Chicago, IL August 12th	

All classes subject a minimum class size of 6 people. EHS may cancel any date with a full refund. Contact us at Jim-CharlesPE@charter.net or (616) 866-9152. Any of these programs can be conducted at your site for the costs of training 4 to 5 students that's a **50% discount plus you save travel costs.**

Don't see your location? Call us!!!

Who's taking these classes?

- Dana
- Exelon Energy
- Delphi
- Eaton Aerospace
- Cascade Engineering
- Steelcase
- Herman Miller
- Pfizer
- General Motors
- Alticor
- DTE Energy
- Honeywell
- American Axle & Manufacturing
- Summit Polymers

Discounted Rates for all classes booked in August and September 2005.

Contractors as Co-generators of Universal Waste Lamps

An elementary school is in the process of remodeling and is replacing its light fixtures with more energy-efficient lamps. This process will generate more than 5,000 kg of spent hazardous waste lamps that will be subject to the universal waste management standards in 40 CFR Part 273. If the school hires a contractor to remove the spent hazardous lamps, who is required to comply with the universal waste standards in Part 273?

Both the school and the contractor will be subject to the universal waste handler standards in Part 273 because they would both be considered universal waste handlers. A universal waste handler is defined as a generator of universal waste or the owner or operator of a facility that receives universal waste from other universal waste handlers (§273.9). A generator is any person, by site, whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation (§273.9). In this case, the school used the lamps and made the determination to discard them and is thus a generator. The contractor that actually removes the universal waste lamps from service is considered a handler and generator of the waste making the school and the contractor cogenerators (64 FR 36466, 36474; July 6, 1999). As cogenerators, both the school and the contractor will be jointly and severally liable as universal waste handlers. EPA recommends that when two or more parties meet the definition of generator they should mutually agree to have one party perform the generator duties (45 FR 72024, 72026; October 30, 1980). The generator duties in this case are those required of a large quantity handler of universal waste in Part 273, Subpart C, which apply to universal waste handlers accumulating 5,000 kilograms or more universal waste at any time (§273.9).

Environmental Compliance University, Grand Rapids & Detroit, MI

EHS is pleased to announce its new “Environmental Compliance University” program designed for the new EHS professional both in industry and consulting positions. This will consist of a series of regulatory focused programs designed to provide an overview of the regulations and applicability to industry. These will be taught in 2-1/2 hour segments over a six week period.

The program is designed to give a good general understanding of the regulations and compliance strategies. This program will start **October 10th** 2005 from 5:00 to 7:30 PM. The cost for the program is \$999 for all six modules or each module is available for \$249. You may register by contact us at JimCharlesPE@charter.net. This program will be limited to 12 people so register early!!!!

Module 1	Hazardous Waste Management (meets 40 CFR 264 and 265 requirements)
Module 2	SPCC /PIPP/SWPP Regulations
Module 3	Chemical Storage and Reporting (Sara Tier II, Toxic Release Inventory)
Module 4	Storage Tank Management (UST and AST)
Module 5	Waste Water Regulations (CWA, NPDES Permitting, Waste Water Reporting)
Module 6	DOT Hazardous Materials Regulations (meets subpart H, 172 requirements)

EPA Clarifies Industrial Startup, Shutdown and Malfunction Requirements

Through proposed regulatory clarifications, EPA is emphasizing that affected industries must minimize emissions during their facilities' startup and shutdown, or at times when equipment is malfunctioning. The proposed clarifications would amend a rule known as the "General Provisions."

The General Provisions require facilities to develop plans that outline how they will operate to minimize emissions during times of startup, shutdown and or malfunction. Providing they minimize emissions at all times, the proposed amendments would allow a facility to alter the plan on a limited basis. Facilities must maintain these plans on site and must report to their state or local permitting authorities that they have complied with the plans. EPA will accept comment on this proposal for 45 days after it is published in the Federal Register.

For more information on this action, visit: http://www.epa.gov/ttn/oarpg/t3/fact_sheets/genprov_fs.html.

Nanotechnology FAQs

The National Institute for Occupational Safety and Health (NIOSH) has developed a new topic page addressing frequently asked questions (FAQ) regarding nanotechnology. The topic page answers basic questions, defines nanotechnology, identifies nanomaterials, addresses the worker health effects, and outlines the NIOSH research program. The topic page can be accessed at www.cdc.gov/niosh/topics/nanotech/faq.html.

OSHA Compliance Officer Averts Electrocution Accident

Two workers were saved from possible electrocution on June 9 by Compliance Officer Scot Campbell of OSHA's Bridgeport, Ct., Area Office. While responding to a complaint pertaining to a fall hazard, Campbell observed employees working on an aluminum pump jack scaffold. The scaffold was only inches from electrical lines entering the structure, and the workers' movements caused the scaffold to sway dangerously close to the electrical lines. Campbell asked the workers to exit the scaffold, and then called Connecticut Light and Power (CL&P). Once onsite, the CL&P representative directed all activity to cease until the electrical line could be de-energized since the closeness of the workers to the hazard posed injuries from electrical shock.

OSHA Voluntary Protection Programs (VPP) Activity

Region III: L.F. Driscoll, Hospital of the University of Penn Renovation Project, Philadelphia, Pa. (New Star); Bayer Material Science, S. Charleston, W.V. (New Star); Oxy Chemical Corp., New Castle, Del. (Cont. Star); Union Carbide Corp., South Charleston Facility, South Charleston, W.V. (New Star) **Region IV:** Atlantic Southeast Airlines, Middle Georgia Reg. Airport, Macon, Ga. (New Star); BE&K Industrial Services, Decatur, Ga. (New Star); NIBCO, Inc., Lithia Springs, Ga. (New Star) **Region V:** Kimberly Clark Corp., Neenah Nonwovens Facility, Neenah, Wis. (New Star); GE Healthcare Technologies, Magnetic Resonance Plant, Waukesha, Wis. (New Star) **Region VI:** Honeywell Hardware Product Group, Roanoke, Texas (New Star); Frito Lay, Technology Process Center, Dallas, Texas (Cont. Star), and **Region IX:** NASA Ames Research Center, Moffett Field, Calif. (Cont. Star). **Is your site in the VPP program? Contact EHS to discuss how to leverage this program.**

The business case for safety

Have you been beating your head against the wall trying to sell safety to your workforce as well as the boardroom?

Made presentations pleading for more money, better staffing levels, and visible buy-in from upper management?

Try shifting your focus from being the safety cop or the safety fireman to a partner. This makes a huge difference in the way safety and health is perceived. To the employee you change from someone forcing rules and cumbersome compliance to a provider of help, an information source, an advocate and an ally.

To management you become a revenue protector, risk reducer, liability eliminator, and in many cases even a revenue generator.

Selling employees

Today's employees are asked to do more with less, become the lean plant, stay competitive, be more productive. This is a natural opening for you to make the case that high (and costly) injury rates equate to less secure jobs in the competitive marketplace.

High-risk employees are not only at high risk for injuries but also for elimination from the world marketplace. I once had the president of my company visit similar operations in a third-world country. He was amazed at the lack of PPE, guarding and other things we've come to know protect our employees. He commented to the hosting plant manager that he surely must have a high (and costly) rate of injuries.

"Hardly any" replied the plant manager. "Every employee understands that if he gets hurt there are a hundred people outside to take his job, he will lose his benefits, and he will no longer have a job. That motivates them to work safely regardless of the conditions or circumstances."

Your employees need to buy into the business case for safety performance. They must understand competitors with an injury-free advantage can literally run them out of business. The price of goods sold can become inflated by workers' compensation costs, employee replacement costs, and medical costs for injured employees. These costs directly reduce bottom line profitability of their company.

Where you see an organization working in an injury-free atmosphere, you'll generally see an organization also highly efficient at quality, production, customer service and other areas critical to maintaining a competitive workforce.

Employees must understand and accept that the global, highly competitive marketplace they work in today is entirely different than it was even five years ago — and radically different than 20 or 30 years ago. This is especially hard for long-term employees to fully grasp.

And of course, your workforce needs to understand their safety truly is important to many people: their families, the company, their coworkers. A moment's failure to be safe can adversely affect them and the organization forever.

Virtual EHS Manager

Nobody can know every aspect of EHS regulations and available technologies. Additionally, small to medium sized firms can not afford to hire full time EHS managers. With the **Virtual EHS Manager** you have access to experts in:

- ◆ Waste Management
- ◆ Air Quality
- ◆ Water Treatment and Permitting
- ◆ MSDS Preparation
- ◆ Indoor Air Quality
- ◆ OSHA Recordables
- ◆ Ergonomics
- ◆ Job Hazard Analysis
- ◆ EHS Training
- ◆ ISO 14001
- ◆ OHSAS 18001
- ◆ Site Remediation
- ◆ SPCC / SWPPP
- ◆ Process Safety Management

You be assigned a fulltime EHS professional who will become familiar with your operations and be able to these and other EHS issues. EHS provides the support through our network of senior level EHS experts/

For \$99/month you could hire an EHS manager and tap the expertise of a full EHS staff.

The business case for safety (con't)

Selling management

Managers are motivated by different drivers: economics, compliance, ethical considerations, long-range plans, stockholder accountability, etc. A major issue is always return on investment dollar. Returns on safety investments exist in most cases, but we must uncover them and present them in a professional way.

For example: Reductions in workers' compensation reserve accounts can often run into the hundreds of thousands of dollars. This is seldom budgeted or even known until long after the books on a year are closed and are forgotten. These are real dollars that can be added right to the bottom line. Aggressive safety and health management can make a tangible, quantifiable monetary difference in the profitability of the company in this area.

Huge dollars are spent to improve efficiency and profitability. It's our job to make sure managers see the correlation between improvements in safety and improvements in quality, customer service, etc.

Many companies are pre-qualifying companies based on safety performance before doing work with them or providing products to them. Their thinking: If you have a poor safety performance record this might very well signal other core deficiencies.

Obviously there are many more selling points — but these alone leave no doubt that exceptional safety performance equates to better business for employees and better business for companies. If you haven't been tracking the business motivators for safety improvements, maybe it's time you started — and stopped beating your head against the wall.

Reprint from: www.ishn.com

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
- ◆ RCRA Permitting and Corrective Action
- ◆ 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
- ◆ 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.**

Legal Corner

How many times have you allowed a business to take advantage of you because it would have cost more to hire an attorney than it was worth? How about points you got on your driving record for your last speeding ticket. How would you like to have an attorney on "retainer" to help you with the following:

- ◆ Answer Legal Questions
- ◆ Will Preparation
- ◆ Contract Review
- ◆ Traffic Court Disputes
- ◆ Legal Disputes
- ◆ Civil Litigation
- ◆ Credit Fraud & Identity Theft Issues

For **\$25/month** you can have full access to these and other legal services. You can literally have a full time attorney on retainer to assist you AND your family with these matters. You will never need to pay \$200/hour again nor need to come up with \$1000 retainer.

If you would like to find out about this cost savings program contact **Kelley** at Jimprjapp@charter.net

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) 866-9152
JimCharlesPE@charter.net**

RECENT DEVELOPMENTS IN BIOLOGICAL TREATMENT OF BREWERY EFFLUENT

During the last two decades the brewing industry has shown increasing awareness for environmental protection and the need of sustainable production processes. Implementation of ISO 14001 certification and more stringent environmental legislation have been important drivers for the brewing industry to invest in biological effluent treatment. The role of biological effluent treatment is discussed with special attention is given to combined anaerobic/aerobic treatment. Combining anaerobic pre-treatment with aerobic post-treatment integrates the advantages of both processes amongst which reduced energy consumption (net energy production), reduced biological sludge production and limited space requirements, are of importance. The combination allows for significant savings on operational costs as compared to complete aerobic treatment without compromising the required discharge standards.

Contact EHS at JimCharlesPE@charter.net for copy of full report.

Remediation Technologies

These remediation technologies were developed with the end in mind—Getting to CLOSURE. These systems can recover free product to get to the source materials and then effectively treat impacted groundwater QUICKLY.

Please contact EHS to learn how these patented technologies can save you money!!! We will work with your existing consultants to implement these proven cost saving technologies.

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

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

Contact us at
JimCharlesPE@charter.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