



MIOSHA NEWS

Director's Column	2
Connecting Update	2
New Developments	3
Construction Update	4
General Industry Update	5
Consultation & Training Update	6
Technical Information	7
Vol. 13, No. 2	Spring 2009

Workplace Safety Provides Solid Benefits

Macomb Community College and MIOSHA re-signed an alliance on February 5th to strengthen and grow the *MIOSHA Training Institute (MTI)*. The MTI has quickly become the premiere provider of workplace safety and health training in Michigan.

"Employers with a strong safety and health system experience significantly reduced workplace injuries – which has a tremendous impact on their bottom line," said **Doug Kalinowski**, MIOSHA Director. "The MTI offers participants the necessary knowledge and hands-on training for safety and health solutions."

MIOSHA's mission is to help assure the safety and health of Michigan's working men and women. Providing workers with a safe workplace is central to their ability to go home healthy and whole every day.

Direct & Indirect Savings

"The training provided through this partnership gives workers and employers the tools they need to create safe, effective workplaces," said **Dr. James Jacobs**, Macomb Community College President. "The MTI partnership has quickly become the standard for workplace safety and health training."

Addressing safety and health issues in the workplace also saves employers money and adds value to the business. Recent estimates place

the business costs associated with occupational injuries from \$155 to \$232 billion – expenditures that come straight out of company profits.

When workers stay whole and healthy, the direct cost-savings to businesses include:

- Lower workers' compensation insurance costs;
 - Reduced medical expenditures;
 - Smaller expenditures for return-to-work programs;
 - Fewer faulty products;
 - Lower costs for job accommodations for injured workers;
 - Less money spent on overtime.
- Safety and health also make big reductions in indirect costs, due to:
- Increased productivity;
 - Higher quality products;
 - Increased morale;
 - Better labor/management relations;
 - Reduced turnover; and
 - Better use of human resources.

Real World Safety Solutions

"The 'New Energy Economy' is Michigan's greatest opportunity to create new jobs, attract new investment, and diversify our economy," said **Susan R. Corbin**, DELEG Deputy Director & Chief of Staff. "Our partnerships with Michigan's community colleges, like this one with Macomb Community College, will play an important role in making Michigan a worldwide leader in the global economy."

Macomb's comprehensive *Workforce Development Institute (WDI)*

administers the alliance. The WDI is focused on maintaining Michigan's competitive edge in the global economy – assisting industry in sustaining a highly skilled workforce and supporting meaningful employment opportunities.

"The Macomb – MIOSHA partnership is paying benefits to Michigan businesses and their employees," said **Dr. James O. Sawyer IV**, Macomb Community College Vice Provost of Career Programs. "Macomb will continue to seek out and develop partnerships with government, industry, and schools and universities, to open new gateways to opportunity locally and across the state."

The MTI delivers affordable, consistent, participant-driven, and informative seminars based on the most up-to-date industry standards in a hands-on, interactive environment. In FY 2008 the MTI offered more than 80 courses statewide at Macomb College, M-TEC facilities, community colleges, and safety and health organizations. MTI classes are consistent throughout the state, and have the same length, format, resources, activities, objectives and assessment.

The *MTI Certification Program* offers participants an opportunity to be recognized for their educational efforts and increased technical expertise. The courses offer Continuing Education Credits and Maintenance Points, as well as an opportunity to achieve *Level One Safety and Health Certification*. There

are two tracks, *General Industry and Construction*.

MTI launched certification classes in October 2007. To date, more than 3,200 individuals have enrolled in the MTI statewide, and more than 90 students have qualified for *Level One Certification*.

Safety Adds Value

■ The costs of reacting to workplace injuries and illnesses far exceed the costs of preventing them.

■ Occupational injuries cost \$155 to \$232 billion annually.

■ The indirect costs can increase the direct costs by a factor of ten.

■ The business costs associated with workplace injuries come straight out of company profits.

■ Federal OSHA's "Safety Pays" is an interactive system to help employers estimate the costs of workplace injuries and illnesses.

■ Businesses use the "Cost Estimator" to predict the costs of injuries and illnesses and the sales needed to compensate for them.

■ The "Safety Pays" program is available on their website at www.osha.gov. Click on "Small Business" in the Index.

CET Services

■ For every \$1 invested in safety and health, a return of \$4 - \$6 can be expected.

■ The MIOSHA Consultation Education and Training (CET) Division offers free statewide assistance.

■ CET Consultants can help employers develop effective safety and health systems that protect their workers.

■ The CET Division can be reached at 517.322.1809 or online at www.michigan.gov/cet.



Above: Signing the alliance are Douglas J. Kalinowski, Dr. James O. Sawyer, Susan R. Corbin, and Dr. James Jacobs.

Right: Fifteen MTI Level One graduates were recognized during the signing ceremony.



Working to Create Michigan's Future Today



Doug Kalinowski, CIH
Director

Worker Safety and Health in Tough Economic Times

The latest economic forecast for Michigan as well as the entire U.S. is a very challenging one. Management guru **Jim Collins** has studied what makes companies succeed for years. His work has been featured in *Fortune*, *The Economist*, *USA Today*, *Business Week*, *Newsweek*, and *Harvard Business Review*.

Collins was recently quoted, "In troubled times a business needs enduring values, the best talent and an

"As I've said many times before, the costs of reacting to workplace injuries and illnesses far exceed the costs to prevent them from happening in the first place!"

ability to 'zoom out' and see past the chaos in front of it."

In his book *Built to Last*, Collins studied 18 companies, such as Proctor and Gamble, General Electric, Johnson & Johnson, and IBM, who went through the Great Depression. All 18 remain standalone companies today.

Not the Time to Cut Corners

All of these companies had deep-rooted core values related to quality, productivity and talented employees. Their reputations were built on quality and giving their customers products that they wanted. When the pressure was on to cut corners or use cheaper ingredients – they just didn't do it!

The same holds true for worker safety and health. When facing the challenging times of today, now is not the time to cut corners. The costs of cutting corners will undoubtedly result in more long term costs and the inability to keep talented employees. As I have said many times before, the costs of reacting to workplace injuries and illnesses far exceed the costs to prevent them from happening in the first place!

It remains crucial for everyone to work together in difficult times to maintain and strengthen safety and health systems. Employers, employ-

ees, insurance carriers, trade associations, and government must all pull together for their common good. The annual \$155 to \$232 billion spent on workers' compensation costs as estimated by Liberty Mutual Insurance Company in 2008 can only be reduced if we work together.

New Strategies in Challenging Times

We in the MIOSHA program also recognize the difficulties that employers and employees are facing and will do all that we can to help you address workplace safety and health issues.

Almost everyone reading this newsletter is familiar with MIOSHA and should know that we offer free consultation services, cost-effective training and seminars, and a significant amount of help through our website at www.michigan.gov/miosha. Do not hesitate to ask for help – MIOSHA staff will provide

specific or comprehensive assistance in a timely manner!

We have also recently created an internal workgroup "*Addressing Safety and Health Issues During Difficult Economic Times*" to further develop new strategies and policies to help employers and employees.

Some of the ideas currently under consideration include the following:

- Identifying successful companies who have developed the cost-effective systems that prevent injuries and sharing their stories.
- Creating strategies so that some of these companies can serve as mentors for others.
- Creating incentives, such as enhanced penalty reductions, for immediate hazard correction.
- Enhancing an employer's ability to participate in a "payment plan" following citations.
- Creating ways that all of our stakeholders can provide input in addressing safety and health issues.

As we move forward with this initiative, we will be looking for input from you. We all have a shared interest and common goal in preventing work-related injuries and illnesses.

In today's economic environment, we really need to work together to *Make a Difference* for Michigan's working men and women!

Tough Times Call for Intelligent Approaches

The Spring 2007 MIOSHA News announced a new "*Connecting MIOSHA to Industry*" initiative. The initiative set goals for us to become more collaborative in our work with employers and employees. This initiative fosters communication, understanding and positive results by increasing support of safety and health systems, decreasing workplace safety and health hazards, and expanding partnership opportunities.

Since announcing this initiative, MIOSHA staff has worked to strengthen interpersonal communication skills, promote dialog and education during every MIOSHA intervention, and enhance coordination of activities. MIOSHA continues to evolve through this initiative.

There is no doubt that these are trying times for all of us – businesses, workers, and government. And, there is no doubt we need to work even more intelligently to find the best solutions.

We know that working smart is a must! We need our collective intellect to generate the best ideas, innovative solutions, and proactive approaches to keep business competitive, government relevant, and workers motivated and productive. But traditional intelligence is not enough. In today's world, we also need "emotional intelligence" or EI.

Working with Emotional Intelligence (EI)

In his bestselling books, *Emotional Intelligence* and *Working with Emotional Intelligence*, **Daniel Goleman** explains that high emotional intelligence provides the ability to recognize and manage our own emotions, thoughts, and impulses and to motivate ourselves. It is also the ability to recognize and respond appropriately to others' needs and emotions to build more effective relationships.

The benefits are both personal and professional. Personally, higher levels of emotional intelligence:

- Enables us to use emotions effectively to manage personal setbacks.



Martha Yoder
Deputy Director

- Helps resolve conflicts and maintain healthy relationships.
- Promotes better physical and mental health.

Professionally, the benefits of EI at work include:

- Improves the performance of people, teams, and organizations.
- Maintains motivation and focus during uncertain times.
- Enhances our ability to give and receive feedback without losing our cool or taking it personally.

MIOSHA Staff Receive EI Training

MIOSHA recognizes the benefits of strengthening EI and we're providing training to all staff. Using EI will help us better serve customers and one another, and enhance organizational effectiveness.

Organizations that promote EI create a culture where there is:

- Balance between human and financial priorities,
- Organizational commitment,
- Open communication and trust-building with all stakeholders,
- Collaboration, support, and sharing resources,
- Innovation, risk taking, and learning together,
- A passion for competition and continual improvement.

Since February 2009, the Department of Civil Service has conducted day-long EI training for MIOSHA staff. The objectives are to:

- Learn why EI is critical in our ability to effectively work with employers and workers;
- Learn to apply tools to enhance our emotional intelligence.
- Become familiar with EI competencies and how the competencies align with MIOSHA and state of Michigan organizational values; and
- Increase awareness of current EI skills;

We are continuing our commitment to increase program effectiveness during the difficult times we are facing. We welcome your ideas and feedback. Please share your ideas with me directly at yoderm@michigan.gov. Stay Positive! Stay Focused!



MIOSHA staff receives Civil Service EI training.

New Center Stamping Fails to Protect Workers

On January 23, DELEG Director Skip Pruss announced the conclusion of a MIOSHA reinspection at New Center Stamping, Inc. of Detroit. The company received 33 citations alleging they failed to adequately protect employees from serious safety hazards, with proposed penalties totaling \$102,060.

New Center Stamping, Inc., 950 E. Milwaukee, Detroit, is an after-market parts supplier to General Motors, Ford Motor Company and Chrysler Corporation. It provides stamped fenders, doors, bumpers, and other items used in collision work on out-of-production models.

"Conditions found during the MIOSHA reinspection were very serious. It is imperative that New Center Stamping correct the serious hazards which are endangering their employees," said Pruss. "They must fulfill their obligations under the MIOSH Act and provide a safe and healthy work environment for their employees."

Inspection History

MIOSHA planned/scheduled inspections target establishments with high injury/illness rates and a high incidence of lost workday cases, based on Michigan data. The intent of the scheduled inspections is to identify hazardous conditions, so that the hazards can be corrected before injuries and illnesses occur.

In 1997, the MIOSHA General Industry Safety and Health Division conducted a planned, wall-to-wall inspection at New Center Stamping that resulted in 39 Serious, 10 Repeat Serious, and 38 Other-than-Serious (OTS) violations. The inspection had a total assessed penalty of \$119,925. This inspection case was resolved and closed, with all items abated, on December 15, 2004.

In December 2006, MIOSHA conducted another planned, wall-to-wall inspection of this facility that resulted in 19 Serious, 1 Repeat Serious and 13 OTS violations, with an assessed penalty

of \$24,700. This case file was closed, with all items abated, on April 25, 2007.

Comprehensive Reinspection

Between September 23 and October 29, 2008, MIOSHA conducted a comprehensive reinspection at this facility. MIOSHA reinspects workplaces where a comprehensive planned inspection has taken place, with at least five serious hazards identified and corrected. The objective is to determine whether safety and health measures put in place are being maintained.

A review of the company's operating procedures revealed previous abatement were not being maintained in the facility. The safety officer observed many repeated serious violations. A review of the company's 2007 MIOSHA 300 Log revealed an amputation, four lacerations and other serious injuries, even though the log was not properly maintained.

Citation Summary - Inspection #308877802

Violations	Proposed Penalties
2 Willful	\$42,000
6 Repeat Serious	\$39,000
11 Serious	\$19,800
4 Repeat OTS	\$660
10 OTS	\$600
33 Violations	\$102,060

The alleged Willful violations included: failure to provide properly functioning brake monitors on presses; and failure to train employees in hazards associated with power lockout procedures.

The alleged Repeat Serious violations included: failure to guard belts and pulleys; failure to train power press operators; failure to fix in place two-hand controls on power presses; failure to use hand tools to remove scrap from dies; failure to check for safeguards during die setting procedures on presses; and failure to guard employees against accidental contact with live parts of electrical equipment.

MIOSHA Rules Protect Workers

In fiscal year 2008, MIOSHA reinspected 110 companies and 55 improved their safety and health environment. Of these 55 companies, 32 sites received a "Certificate of Recognition" to acknowledge their proactive efforts because they also had less than five Serious violations.

"Taking the time to follow MIOSHA regulations can not only protect workers – it can greatly enhance a company's bottom line," said MIOSHA Director Doug Kalinowski. "Successful Michigan companies have shown that a strong safety and health system contributes to increased production, improved quality and greater profits."

A Willful violation is one committed with an intentional disregard of the requirements of MIOSHA regulations, or plain indifference to employee safety and health. A Repeat violation is a violation of the same rule within three years. A Serious violation exists where there is a substantial probability that serious physical harm or death can result to an employee. An Other-than-Serious (OTS) violation is a condition that would probably not cause death or serious physical harm but would have a direct and immediate relationship to the safety and health of employees. The company has appealed the violations.



On this mechanical power press, the two-hand controls were not established and fixed in a safe location.

MSU Teaches How to Rescue Workers Caught in Machinery

Michigan State University's emergency-response experts will train firefighters from across the state on how to free people who are trapped in machinery – a problem that has led to more than 100 deaths and untold injuries in the past five years.



The machine rescue training uses mannequins to teach removal techniques.

The training, funded by a MIOSHA CET Grant, began January 20th at Ford Motor Co.'s idled Wixom Assembly Plant. It's based on a similar program MSU developed for Ford, who is donating the use of its Wixom plant and machinery for the training.

Firefighters are often first on the scene of someone caught in machinery – whether it's a printing press, a snow groomer or an elevator. But firefighters who aren't trained on proper extrication can cause further injury to the victim or even themselves, said Scott Tobey, program director and head of MSU's Emergency Response Solutions.

"An unknowing rescuer, for example, may attempt to run a machine in reverse when attempting to remove a victim's arm or leg and hurt the victim worse," Tobey said.

Using mannequins, the training covers the three basic ways to remove someone from a machine:

- Cutting them out with tools such as a torch;
- Disassembling the machine; or
- Lifting and spreading the machine with a pneumatic device.

In 2007, 16 workers died in machine-related deaths in Michigan. For the five-year period ending 2007, there were 113 machine-related deaths – or 17 percent of all traumatic work-related fatalities. "And the report doesn't include all the nonfatal machine-related injuries like amputations," Tobey said.

Ron Zawlocki, a program trainer and retired battalion chief with the Pontiac Fire Department, helped research and develop the machine-rescue program. He said he was surprised that he couldn't find any formal training programs that exist across the country.

The training lasts three days and is free. For more information contact MSU's Jim Porter at 517.881.3917 or porterj@msu.edu.

The MSU School of Criminal Justice received a 2009 MIOSHA CET Grant. The "train-the-trainer" training is directed to firefighters, their officers, and fire chiefs. These fire service personnel return to their own fire departments and train their employees. For more information visit the CET Grants website at: www.michigan.gov/mioshagrants.

**Bob Pawlowski, CIH, CSP,
Director, Construction
Safety & Health Division
517.322.1856**

Construction Season 2009

By: Robert Pawlowski, CSHD Director

The construction industry remains one of the most hazardous industries in Michigan.

In calendar year 2008 the MIOSHA Construction Safety and Health Division (CSHD) investigated **15 fatalities** in the construction industry including:

- 5 Falls,
- 3 Electrocutions,
- 6 Struck-by incidents, and
- 1 Crushed incident.

From 2001 through 2008, the CSHD investigated 63 fall, 34 struck-by, 29 electrocution, and 12 excavation cave-in fatalities. This is why employers and employees must be particularly aware of the hazards that cause such accidents.

Safety & Health Inspections

MIOSHA began its third 5-year Strategic Plan on October 1, 2008. The Construction Safety and Health Division continues to focus on the strategic plan areas listed below during our inspections.

Strategic Plan Initiatives	
Safety	Health
Falls	Lead Exposure
Electrocutions	Silica Exposure
Struck-By	Noise Exposure
Crushed-By/	Asbestos Exposure
Caught-Between	Isocyanate Exposure

Accident Prevention Program

MIOSHA Construction Safety Standard, *Part 1, General Rules*, requires that employers have a written *Accident Prevention Program (APP)* specific to each of their worksites. The APP must address:

- Identify a "Qualified Employee" who knows the hazards specific to the worksite.
- Instruction on the recognition and avoidance of hazards and how to control or eliminate hazards, and the safe use of tools, materials and equipment.
- Inspections of the worksite to assure unsafe conditions are eliminated.
- Awareness of hazardous substances, poisons, toxins, caustics, and harmful plants, animals and insects.
- Each site must have first aid supplies, an emergency plan, and at least one person trained in first aid.



An operator was electrocuted when his boom snapped this telephone pole. (See description in Case Summaries.)

Safety and Health Management Systems in Construction

By: Bob Pawlowski, CSHD Director

Effective management of worker safety and health is a decisive factor in reducing the extent and severity of work-related injuries and illnesses. *Safety and Health Management Systems (SHMS)* address all work-related hazards. There are five major elements of an effective SHMS:

- Management Commitment and Planning,
- Employee Involvement,
- Worksite Analysis,
- Hazard Prevention and Control, and
- Safety and Health Training.

The MIOSHA Construction Safety and Health Division (CSHD) has traditionally reviewed employer compliance with *Part 1, General Rules, Rule 114 (Accident Prevention Program)*, which is specific to each job site.

Under the 5-year Strategic Plan beginning October 1, 2008, the CSHD will now also evaluate a construction company's overall safety and health management system. CSHD contacts include all inspection activity, employee complaints, fatalities, referrals, and training activities.

Safety Officers and Industrial Hygienists (SO/IH) Emphasize SHMS

- During 100 percent of MIOSHA con-

tacts, safety and health management systems will be promoted.

■ The SO/IH will complete an SHMS evaluation when an employer has three or more proposed Serious, Willful, and/or Repeat violations.

■ The SHMS will also be evaluated during serious accident and fatality investigations.

■ The completed *SHMS Evaluation Form* will be provided to the employer.

■ Employers who do not have a SHMS will be encouraged to complete a self evaluation.

The *SHMS Evaluation Form* is on the MIOSHA website, www.michigan.gov/mioshapublications.



Detroit Edison's Monroe Power Plant has an effective safety and health management system.

Asbestos Training/Accreditation Fraudulent Activities

By: George Howard, Asbestos Program Manager

The MIOSHA **Asbestos Program** approves trainers who provide training to individuals interested in becoming accredited as asbestos abatement workers, project supervisors, building inspectors, project designers or management planners.

An approved asbestos trainer is responsible to ensure the classes they provide are in compliance with EPA and Asbestos Program requirements. The content or length of an approved asbestos training accreditation course may not be altered. The Asbestos Program conducts course audits to help assure that trainers are providing courses that meet requirements.

Audits have revealed trainers shortening classes, and issuing certificates without providing training. Either situation is considered a fraudulent activity that can result in criminal enforcement action and revocation of a trainer's approval. Training course attendees are subject to accreditation revocation for knowingly participating in these activities.

The Asbestos Program has issued warning letters to trainers and suspended asbestos trainer approval for not providing training courses that satisfy specified requirements.

Fraudulent training activities can be reported to the Asbestos Program at 517.322.5806. (More details are available at www.michigan.gov/mioshanews.)

OPERATOR – ELECTROCUTION FATALITY

In September 2008, a 44-year-old owner/operator of a concrete form company had finished pulling and loading forms and didn't lower and properly secure the lifting arm of the articulating boom crane. While moving the truck-crane, the boom snagged a telephone cable, snapped the pole, and caused the 7200 volt power lines to fall behind the truck. The victim unknowingly backed the truck out of the roadway, and contacted the energized lines with the truck. The victim was electrocuted when he exited the cab.

MIOSHA violations (not inclusive):

- Part 1, General Rules, Rule 114(1) - No Accident Prevention Program developed.
- Part 10, Lifting and Digging Equipment, Rule 1006(a)(1) - Not following the manufactures recommendations; operating the truck-crane.

CASE SUMMARIES

IRON WORKER – FALL/STRUCK BY FATALITY

In August 2008, a 41-year-old iron worker was working on top of one of the structural steel members he was bolting up. The other end was welded to a plate at the top of a masonry block wall. The victim was maneuvering the member to make the connection when the welded end broke away, causing the employee to fall 14' to the ground. The structural steel member followed, striking the employee and causing fatal injuries.

MIOSHA violations:

- Part 6, Personal Protective Equipment, Rule 622(1) – Appropriate head protection not worn.
- Part 26, Steel Erection, Rule 2614(1) – Stability of structural member not maintained during the erection process.

Landscape Season 2009: Gearing Up for Safety & Health

By: Michael T. Mason, GISHD Safety and Health Manager

Now is a good time for green industry employers to review their safety and health programs and make any necessary adjustments before the 2009 landscape season begins in earnest.

Landscape Industry Hazards

Landscape workers are at risk of injury from a wide variety of hazards, including exposure to chemicals, noise, machinery, lifting, construction, and weather-related hazards. This article helps to identify potential hazards and possible solutions to two specific activities, tree trimming and removal, and the use of powered groundskeeping equipment.

Tree care companies provide services such as pruning, tree removal, diagnosis of disease, insect and disease control, and tree and shrub fertilization. Many hazards in the tree care industry are potentially fatal. Exposure to overhead power lines, falling branches and tools, and faulty safety equipment are just a few of the dangers.

Part 53, Tree Trimming and Removal

When an employee is performing tree-trimming near power lines, *Part 53,*



Tree Trimming and Removal, Rule 5321 applies. An electric conductor or communication line must be considered energized unless the systems utility or owner indicates otherwise and they have visibly grounded the conductor or line.

Tree workers and qualified line-clearance tree trimmers must be aware of and maintain the proper minimum approach distances as specified in *Rule 5321* when working around energized power lines.

Tree trimming and removal safety tips are provided on the *Tree Trimming and Removal OSHA Quick Card™* on their website at www.osha.gov, in the Publications section.

Part 54, Powered Groundskeeping Equipment

Tree care, lawn and landscape maintenance employers make use of powered groundskeeping equipment. This equipment is used to perform such tasks as mowing, pruning, fertilizing, general clean-up, and blowing. The requirements for using powered groundskeeping equipment are provided in *Part 54, Powered Groundskeeping Equipment.*

Can air-purifying respirators be used for isocyanates?

Because isocyanates have relatively poor warning properties (odor, taste, or irritating effects), the use of air-purifying respirators has been discouraged, but not prohibited.

MIOSHA *Part 451, Respiratory Protection*, states "the employer shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and the workplace and user factors that affect respirator performance and reliability."

The standard requires that for protection against gases and vapors, an air-purifying respirator may be used provided that:

- (1) The respirator is equipped with an end-of-service life indicator (ESLI) certified by NIOSH for the contaminant; or
- (2) If there is no ESLI appropriate for conditions, the employer implements a change schedule for canisters and cartridges that is based on objective data that will ensure they are changed before the end of their service life.

Currently, there are no ESLIs for isocyanates. Therefore, the employer must describe in the respirator program the information and data relied upon, and the basis for the change schedule and the basis for reliance on the data.

CASE SUMMARIES

MACHINIST – STRUCK BY FATALITY

In November of 2008, three employees were removing an end cap from a press roll on a paper machine. Attempts to remove the end cap with pusher bolts failed. The employees attached air valve and pressure gage and applied air pressure, which failed. The pressure was left and a later attempt by one employee with a pusher bolt released the end cap. It struck the employee in the chest resulting in death.

MIOSHA violation:

- Act 154 PA of 1974, Rule 4080.1011(a), General Duty – Employer did not develop and utilize procedures to restrain roll end caps during disassembly under pneumatic or other forms of pressure.

LABORER – ASPHYXIATION FATALITY

Employee was found deceased inside a controlled environment room. The employer uses atmosphere rooms where there is less than 3% oxygen to preserve stored fruit. The deceased removed a hatch cover and entered one of the rooms where he was found unresponsive.

MIOSHA violations:

- Part 490, Permit Required Confined Spaces: Rule 1910.146(c)(1) – Evaluate the work place for permit required confined spaces. Rule 1910.146(c)(4) – Develop a written permit space program.
- Part 92, Hazard Communication, Rule 1910.1200(e)(1) – No written hazard communication program.
- Act 154 PA of 1974: Rule 408.01014(c) – Unlabeled pipes or piping systems. Rule 408.01014(j) – No hazard communication signs posted.

John Brennan, Director General Industry Safety & Health Division 517.322.1831

Bell's Landscape Receives Certificate of Recognition

By: Adrian Z. Rocskay, Ph.D., CIH
GISHD Safety and Health Manager

Bell's Landscape Services of Wixom recently received a *Certificate of Recognition* for improvements to its safety and health system. The certificate recognizes employers that have fewer than five Serious citations during MIOSHA reinspections.

Under MIOSHA's reinspection program, all employers that receive five or more Serious citations during a programmed inspection are reinspected. Bell's was inspected in 2006 and reinspected in 2008. **During the reinspection at Bell's Landscape, no violations were found.**

Bell's Safety Program

Bell's safety program was created with the help of a CD from *PLANET, Professional Landcare Network*, a green industry association. The CD helped Bell's design a safety manual specific to its operations. The CD comes with a monthly newsletter of safety tips. Bell's reviews these tips with employees at its weekly safety meetings.

"The three points we stress over and over again are the use of eye protection, the use of foot protection, and the use of hearing protection," said **Marcy Bell**. "No one leaves without their safety glasses or ear muffs. If a guy comes in with tennis shoes, he doesn't work that day."

Bell's injury rate has been low. When injuries do occur, they are typically minor: a bee sting, a small cut, a piece of bark flying into the eye of an employee under his safety glasses.

The Case for Safety

The company makes the case for how a good safety program can increase efficiency. Bell states, "Any injury causes down time, so a safe work site means higher productivity."

The firm also sees a link between its emphasis on safety and its low employee turnover (unusual for the industry) and the numerous awards its landscape designs have won from the green industry.

"When you value employees, they stick with you," said Bell. "And they want to do a good job."



Mike Bell receives the Certificate of Recognition from Eva Hatt, GISHD Acting Director at the 22nd Annual MGIA Trade Show & Convention.

**Connie O'Neill, Director
Consultation Education &
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Top 25 MIOSHA Safety & Health Violations

By: Fred Kirkland, Jr., Industrial Hygienist, CET Division

Work-related fatalities, injuries and illnesses continue to take a significant human and economic toll in Michigan.

The MIOSH Act requires employers to provide a workplace free from recognized safety and health hazards. The purpose of MIOSHA safety and health standards are to set minimum requirements and provide guidelines for identifying and correcting the hazards contributing to workplace fatalities, injuries and illnesses.

The MIOSHA program is required to monitor the safety and health conditions in workplaces covered by the MIOSH Act. Typically, compliance inspections and consultations focus on Michigan workplaces with the highest injury and illness rates. MIOSHA safety and health standards

must be complied with, even though a company may not receive a compliance inspection or a consultation.

MIOSHA consultations focus on providing training and information on workplace safety and health requirements and best industry practices. Consultations are free and are performed by staff separate from the MIOSHA enforcement divisions.

Below are the **Top 25 Safety and Health Violations** as cited by the General Industry Safety and Health Division. In years past, this data focused on rule violations. This year the data provides information on the **most frequently cited standards** for both safety and health. The list is compiled from information generated by the MIOSHA Management Information System Section (MISS).

Top 25 MIOSHA General Industry Violations			
By Standards – October 1, 2007 - September 30, 2008			
Rank	Standard	Description	Total
1.	39	Design Safety Standard for Electrical Systems	1,307
2.	92 & 430	Hazard Communication - Right to Know	1,037
3.	1	General Provisions	855
4.	33 & 433	Personal Protective Equipment	735
5.	21	Powered Industrial Trucks	586
6.	85	The Control of Hazardous Energy Sources	567
7.	7	Guards for Power Transmission	538
8.	2	Floor & Wall Openings, Stairways & Skylights	531
9.	12	Welding and Cutting	402
10.	6	Fire Exits	382
11.	OSH 11	Recordkeeping	370
12.	1A	Abrasive Wheels	329
13.	40	Electrical Safety-Related Work Practices	297
14.	451	Respiratory Protection	244
15.	26	Metalworking Machinery	213
16.	8	Portable Fire Extinguishers	192
17.	24	Mechanical Power Presses	186
18.	18	Overhead and Gantry Cranes	181
19.	14	Conveyors	174
20.	27	Woodworking Machinery	167
21.	90 & 490	Confined Spaces	151
22.	472	Medical Services & First Aid	123
23.	49	Slings	122
24.	54	Powered Groundskeeping Equipment	115
25.	305	Asbestos for General Industry	109

MIOSHA News Quiz

Topic: Power Presses

The quiz is written by MIOSHA safety and health professionals and topics cover a wide range of safety and health issues. The quiz is available at www.michigan.gov/mioshanewsquiz.

Construction MVPPC Pilot Programs

By: Sheila Ide, CET Supervisor

Construction industry representatives and MIOSHA staff have been working cooperatively to create a Michigan Voluntary Protection Program for Construction (MVPPC).

Michigan is ready to implement fully functioning MVPPC pilot projects. The pilots uphold the MVPP principles already successful in Michigan's general industry program.

At least three MVPPC pilots will be initiated in 2009, targeted at three types of construction activities:

- **Fixed-base** are site-specific projects, typically multi-employer sites with one or more controlling employers;
- **Mobile workforces** are subcontractors or specialty trade contractors with workers who move from site to site; and
- **Resident contractors** perform construction-related services at host sites such as power plants, chemical/petroleum facilities, etc.

Applicants must have been in business at least three years and show incident rates at or below the industry average for the past three years.

Companies must submit a detailed application which includes a comprehensive self-evaluation and agree to on-site audits of their work operations initially and annually. Successful candidates will be exempted from programmed inspections, serve as mentors to other companies, and earn the right to fly the MVPPC flag.

Unique aspects of construction will be a focus of the MVPPC, such as:

- Providing injury and illness data for all subcontractor employees for whom the contractor has responsibility and/or authority;
- Explanation of how employees will be protected when the employer is not in direct control of the worksite; and
- Other hazards and concerns that are specific to the work operation and project.

MVPPC guidelines are at www.michigan.gov/mvpp. There is an **MVPP Workshop** on May 5th; see the CET Training Calendar on our website.

Improving Safety & Health in State Government

By: Connie O'Neill, CET Division Director

MIOSHA is committed to helping public-sector employers establish strong safety and health programs at their worksites to protect public employees.

As a State Plan, the MIOSHA program is similar in many respects to federal OSHA. One important difference is that MIOSHA rules apply to the public sector, as well as the private sector.

MIOSHA and the **Office of the State Employer (OSE)** re-signed a formal alliance on March 6th to improve workplace safety and health in state government. Since 2005, both organizations have worked diligently to achieve a common goal for state departments and agencies to implement a safety and health management system.

The OSE encourages all state departments to use the **"MI-Safety" Safety and Health Management System** approach, which actively engages employees in safety. The system approach reduces the financial and emotional impact of accidents.

A key goal of the alliance is to deliver **MIOSHA Training Institute (MTI)** courses to state safety and health representatives. During the signing ceremony, 20 state of Michigan safety and health representatives achieving **MTI Level One Certification** were recognized.

The MTI training was funded by OSE and provided by the MIOSHA CET Division. OSE MI-Safety Manager **Steve Monet** and CET Safety Consultant

Debra Gundry coordinated the training. All of the 20 state representatives took four required courses and passed the testing requirements. Contact the CET Division for alliance information.



Ask MIOSHA

Question: Is there any requirement to have guards over the start/stop switches for small, plugged in bench grinders and drill presses?

Answer: MIOSHA General Industry Safety Standard, *Part 1, General Provisions*, states: "When unexpected motion would cause injury, an actuating machine control, except for an emergency device for a powered fixed or transportable machine, shall be guarded or located to prevent accidental actuation."

Depending on the type of machine and how the machine is used, other MIOSHA safety standards may also apply. These may include General Industry Safety Standards, *Part 26, Metal Working, Part 27, Woodworking*, and others. In general, if the unintentional actuation of an activating control presents a hazard the control must be guarded.

Question: I am setting up a work space where bench top and standing power tools will be utilized. Is there something that I can reference that will give me some guidelines as to how far one machine should be from another machine or is that just deferred to common sense?

Answer: Generally, these issues are "common sense," however, there are guidelines in General Industry Safety Standard *Part 1, General Provisions, Part 1, Rule 31, Machine Installations*, states:

(2) A machine shall be placed so that it will not be necessary for the operator or other employee tending the machine to stand in an aisle.

(3) A machine shall be located so that there will be space for the employee to handle the material and operate the machine with no interference to or from another employee or machine.

(4) A machine installed on a bench, table or stand shall be designed or secured to prevent unintentional movement or tipping.

(5) A stationary machine shall be anchored or provided with antislip pads to prevent unintentional movement.

These general rules apply to equipment and machinery in most workplaces. Some MIOSHA standards apply to specific operations (e.g., sawmills, bakeries, etc.). If you are in an industry for which MIOSHA has a specific standard, check that standard for specific requirements for your industry. If MIOSHA does not have a specific standard for your industry, refer to general standards such as *Part 1, General Provisions* (referenced above).

www.michigan.gov/askmiosha

Variations

Variations from MIOSHA standards must be made available to the public in accordance with Part 12, Variations (R408.22201 to 408.22251). MIOSHA variations are published in the MIOSHA News website: www.michigan.gov/mioshavariations

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The MIOSHA Appeals Division oversees the settlement of cases where citation(s) have been issued.

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Standards Update

Status of Michigan Standards Promulgation

General Industry Safety Standards Commission

- GI Part 74, Fire Fighting, an advisory committee was appointed to update this standard.

Construction Safety Standards Commission

- CS Part 2, Masonry Wall Bracing, an advisory committee is drafting revisions to update the standard.
- CS Part 10, Lifting and Digging Equipment, an advisory committee is considering crane operator certification.
- CS Part 29, Communication Towers, an advisory committee drafted a new standard. Revisions from the July 15, 2008, public hearing were approved by the Commission. The Joint Committee on Administrative Rules (JCAR) is reviewing the proposed standard.

Occupational Health Standards Commission

- OH Part 301, Air Contaminants in General Industry, and OH Part 601, Air Contaminants in Construction, draft language has been prepared to add air contaminant limits for hexavalent chromium (Cr6+) and diisocyanates, and to change air contaminant limits for ammonia and coal dust, and update standard. A Request for Rulemaking has been approved by the State Office of Administrative Hearings and Rules (SOAHR).
- OH Part 316, Diisocyanates, an advisory committee drafted a new standard. A Request for Rulemaking has been approved by SOAHR.
- Latex Advisory Committee, an advisory committee is reviewing hazards related to occupational use of latex, particularly latex gloves for personal protective equipment.

Proposed Crane Operator Certification Rule

(Amendment to Construction Safety Standard *Part 10, Lifting and Digging Equipment*.)

The Construction Safety Standards Commission appointed an advisory committee and charged the advisory committee with considering crane operator certification due to several fatal crane accidents that had occurred nationwide. Updating existing protections and requiring crane operators to be trained in the use of construction cranes would increase protection for construction workers and prevent crane accidents.

The *Lifting and Digging Equipment Advisory Committee* consists of eight labor representatives and nine management representatives from small and large businesses. The advisory committee is meeting monthly and has met five times. The advisory committee is reviewing the language of the proposed OSHA standard, §1926.1427 Operator Qualifications, and similar standards from several states. The advisory committee has started drafting proposed language that could be added to MIOSHA Part 10.



Proposed Ergonomics Standard Update

On August 25, 2008, the *Ergonomics Standard Advisory Committee* formally submitted their proposed minimum ergonomics standard to the General Industry Safety Standards Commission and the Occupational Health Standards Commission.

On January 14, 2009, the Commissions unanimously agreed to move the proposed standard forward for rule promulgation after including an exemption for the jurisdiction covered exclusively by the Federal Railroad Administration, removing a "grandfather" provision, and incorporating a phase-in provision of six months after the final rule is filed with the Secretary of State.

A "Request for Rulemaking," a statement of "Clear and Convincing Need," and a "Regulatory Impact Statement (RIS)" must be developed for the proposed standard to be considered by the DELEG Director for informal

approval. This rule promulgation step will begin a rigorous review process.

Due to the broad scope of the proposed standard, MIOSHA is seeking proposals from third-party organizations to develop sections of the RIS through a formal contract. MIOSHA has not done this before, but believes that this should result in a more timely and thorough product than we might be able to develop using our existing resources.

Once the RIS is completed and reviewed, DELEG will determine whether to issue informal approval. If informal approval is received, public hearings will be scheduled across the state to receive and consider comments from all Michigan citizens.

Following public hearings, the Commissions will consider all comments. This consideration may result in no changes to the draft; the advisory committee may be reconvened to consider concerns, suggestions, requests for amendments to the draft rule; or may result in no further action on the draft.

MTI Sample Course – Construction

MIOSHA Construction 10-Hour Course

Level One courses are designed for new safety and health coordinators, committee members and others interested in general safety and health information. There are two tracks: General Industry and Construction. The MIOSHA Construction 10-Hour Course is one of the courses required to achieve Level One Certification.

Similar to an OSHA 10-Hour construction course, pertinent safety and health hazards are

Level I: Construction Certification

Required

MIOSHA 10 Hour Construction Course

Electricity: The Invisible Killer

Electives

Asbestos Awareness

Excavations: The Grave Danger

Health Issues in Construction

Construction – Part 45 Fall Protection

MIOSHA Recordkeeping/Cost of Injuries

Supervisor's Role in Safety and Health

When MIOSHA Enforcement Visits

MTI website: www.michigan.gov/mti

identified and discussed. In addition, MIOSHA standards are highlighted throughout the two-day course. The course provides students an overview of MIOSHA regulations for the construction industry.

Detailed information is provided to help participants develop an accident prevention plan as required by Rule 114 of MIOSHA Construction Safety Standard Part 1, General Rules. Also included is a review of MIOSHA inspection procedures, as well as the most frequently cited MIOSHA violations in the construction industry.

Key Learning Objectives

- Provide an introduction and overview of MIOSHA/OSHA structure and procedures.

- Review and discuss relevant sections of the following standards: General Rules; Scaffolds; Aerial Work Platforms; Ladders; Guarding of Walking/Working Surfaces; Handling and Storage of Materials; Lifting and Digging Equipment; Mobile Equipment; Personal Protective Equipment; Electrical Installations; Excavation, Trenching & Shoring; and Fall Protection.

- Discussion of health issues in construction to include: asbestos, lead, cadmium, carbon monoxide, isocyanates, chromium, and noise.

As an added benefit, MIOSHA trainers are trained and certified to issue both MIOSHA and OSHA 10-Hour cards which are considered highly desirable for those seeking contracts with many large manufacturing and construction companies in Michigan.



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The Mission of the MIOSHA Program is: To Help Assure the Safety and Health of Michigan Workers.

The MIOSHA News is a publication of the MIOSHA program. Its purpose is to educate Michigan employers and employees about workplace safety and health and we encourage reprinting.

DELEG is an equal opportunity employer/program. Auxiliary aids, services and other reasonable accommodations are available upon request to individuals with disabilities.

Website: www.michigan.gov/deleg

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