



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. 16, No. 2	Spring 2012

Construction Partnerships: Improve the Bottom Line

By: Patty Meyer, Director, Construction Safety and Health Division

The MIOSHA Construction Safety and Health Division has entered into 13 partnership projects over the past seven years. The contractors and workers who have been fortunate to work on a construction partnership project already know the benefits, i.e. less injuries, more collaboration among workers, and incentives for safe work practices. For those who haven't had the opportunity to work on a partnership project, read on...you may be surprised!

Working Safer Saves Money

This is a success story about the MIOSHA partnership at the **Accident Fund Holdings, Inc. Headquarters Project (AFHQ)** in downtown Lansing with **The Christman Company** as the Construction Manager. At the completion of project, we asked the workers what they thought of partnering with MIOSHA and was this partnership successful. Some of the worker comments were:

■ "This partnership changed me...I'm proud to have been a part of this...it would be hard to go back to the old way of doing business."

■ "The partnership helped everyone learn to trust one another...we were encouraged to bring up any safety situation."

■ "We were appreciated...they listened."

It was wonderful to hear these great comments, but it was the comment from **Doug Peters**, Safety Director for Christman Constructors, Inc., that prompted me to learn more. Doug said that this partnership played a major role in controlling safety-related costs. **That's right...they reduced risk and saved on the bottom line by working safer!**

Cast-in-Place Concrete Construction

During 2009-2010, **Christman Constructors, Inc.**, constructed a **cast-in-place concrete parking structure** at the AFHQ project. These types of structures are very high-risk and present several unique safety challenges. The work is conducted at heights that require significant resources and planning to ensure employees are protected from falls throughout each phase of the project.

Specific planning and coordination for rigging, hoisting, swinging and moving loads are required for almost every task. In addition, structural concrete workers continuously install heavy formwork and shoring to ensure that the hardened concrete strengths are sufficient.

Christman Constructors **developed best work practices** in advance in order to mitigate or eliminate worker risk exposure for cast-in-place parking structures. They compared injury and illness data from several cast-in-place parking structures they completed on other Michigan construction projects and then used this data to refine their best work practices to make this type of work even safer.

The AFHQ project was the second partnership project

that Christman Constructors participated in; they also built a cast-in-place parking structure at the **Michigan Street Development Partnership Project in Grand Rapids**.

Comparison of Partnership to Non-partnership Projects

Christman Constructors, Inc. has completed six parking structures from 2005 - 2011. All six parking structures were similar in many ways including design, formwork types, hoisting, weather conditions, supervision, workforce, and incident reporting procedures. The combined man-hours for all six projects totaled approximately 579,000 man-hours.

Christman Constructors came to the following conclusions:

■ Their average DART rate was **ZERO** for the two partnership parking structures, while the average DART rate for the four non-partnership parking structures was **1.9**.

■ Their average DART rate for all work completed by Christman Constructors at the partnership projects was **0.33** while the average DART rate for all work completed at the non-partnership projects was **0.81**.

■ Their overall TCIR was significantly impacted by the excellent safety performance on the partnership projects with a **1.34 TCIR** rate on the partnership projects and a **5.00 TCIR** rate on the non-partnership projects.

Christman Constructor realized the emphasis on team collaboration that took place on their two MIOSHA partnership projects as opposed to their traditional enforcement methods on their other four projects proved not only to be a great fit with their project management culture, but also in their bottom-line effectiveness on higher-risk projects. **Overall, productivity increased and injuries were reduced, therefore creating safety-related savings!**

Contact the Construction Safety and Health Division at 517.322.1856 for more information about MIOSHA construction partnerships and create your own success story!



Construction Partnerships

MIOSHA's construction partnership companies have demonstrated an outstanding commitment to promoting worker safety and health on their projects.

Christman - Board of Water & Light REO Town Project - Lansing - 2011

Pioneer Construction - Grand Valley State University Mary Idema Pew Library Project - Allendale - 2011

Barton Malow - C.S. Mott Children's and Women's Hospital Project - Ann Arbor - 2010

Barton Malow - Stoney Corners Wind Farm Project - McBain - 2010

Barton Malow - Severstal Modernization Project - Dearborn - 2010

Christman - Accident Fund National Headquarters Project - Lansing - 2009

Kamminga & Roodvoets - Muskegon County Wastewater Management System - Muskegon - 2009

Kamminga & Roodvoets - Kalamazoo Avenue Project - Grand Rapids - 2008

Christman - Michigan Street Development Project - Grand Rapids - 2007

Barton Malow/Skanska - Beaumont Hospital Expansion Project - Troy - 2007

Detroit Edison - Monroe Power Plant Environmental Controls Construction Project - Monroe - 2007

Walbridge Aldinger & Barton Malow - Detroit Metro Airport North Terminal Project - Romulus - 2006

Walbridge Aldinger - Dearborn Combined Sewer Overflow Contract # 3 Project - Dearborn - 2005





Martha Yoder
Director

ORR Report Released

On March 12, 2012, the **Office of Regulatory Reform (ORR)** issued its report to **Governor Snyder** containing recommendations for improving Michigan's workplace safety and health regulations. On March 14th, the report was presented to the House Committee on Regulatory Reform.

This report includes 624 recommendations for changes to 334 separate MIOSHA rules that exceed the federal standards with rescission of over 611 distinct MIOSHA requirements recommended. The ORR made nine additional recommendations. (See Standards Update, Page 7) We are currently working with LARA and ORR in response to this report.

The goal of the ORR is to ensure that Michigan's regulatory environment is simple, fair, efficient, and

"The ORR project has provided the opportunity for a much-needed update of MIOSHA regulations by eliminating rules that are duplicative, obsolete, or seldom used."

conducive to business growth and job creation. The purpose of the Workplace Safety Advisory Rules Committee was to produce advisory recommendations to ORR.

The ORR project has provided the opportunity for a much-needed update of MIOSHA regulations by eliminating rules that are duplicative, obsolete, or seldom used. When completed, the project will improve MIOSHA effectiveness by reducing the number of rules employers must consider when creating their workplace safety and health systems.

MIOSHA and LARA Missions

MIOSHA's mission to help protect the safety, health, fringe benefits and wages of Michigan workers is proactive and continues to serve the program well.

It also blends perfectly with the Department of Licensing and Regulatory Affairs (LARA) focus to be customer driven and business minded, as well as the department's new

mission: To support business growth and job creation while safeguarding Michigan's citizens through a simple, fair, efficient and transparent regulatory structure.

The adjectives **"simple," "fair," "efficient"** and **"transparent"** are demonstrated at all levels and in all MIOSHA program areas. MIOSHA has historically taken the position that we must train and make information available before we regulate. Most recently this describes our work with industry regarding proposed changes for fall protection requirements in the residential building industry (See Connecting column).

Our goal is to keep things simple and understandable by using single topic fact sheets, sample programs, templates, and checklists. Transparency and fairness at MIOSHA includes extensive use of the MIOSHA web page to post program information, ListServes to provide timely updates, and a newly implemented e-news to quickly share news.

It's Great to be Back!

It is wonderful to be back at MIOSHA. I believe strongly in the value and mission of this important program! And, I have high regard for the MIOSHA leadership team. I

look forward to working with Deputy Director **Bart Pickelman** and the Division Directors, as well as our knowledgeable, dedicated staff.

After 30 years, MIOSHA Director **Doug Kalinowski** retired from the MIOSHA program. Doug served in many positions and was MIOSHA Director for the past 10 years. Doug has joined federal OSHA in Washington, D.C., as the Director of the Directorate on Cooperative and State Plan Programs.

Doug's leadership included the guiding principle to "Make a Difference" in everything you do, and he certainly made a tremendous difference to the MIOSHA program.

I am looking forward to the challenges ahead for all of us interested in workplace safety and health issues. Please know that as Doug before me, my door is always open and my phone is always available. Stay in touch and let me know your issues and suggestions.

Residential Fall Protection

Falls are one of the leading causes of construction worker fatalities in Michigan and across the nation. For years falls have been the reason too many of our family members, co-workers, friends and neighbors do not return home at the end of the workday. This is the reason many people have been working hard to prevent these unnecessary deaths. The latest effort is focused on falls that occur on residential construction sites.

The MIOSHA Part 45, *Fall Protection*, standard requires that employees engaged in residential construction activities six feet or more above lower levels shall be protected by guardrail, safety net, or personal fall arrest system (i.e., conventional fall protection) except where employers can demonstrate that such conventional fall protection systems are infeasible or would create a greater hazard.

In 2004 MIOSHA issued compliance criteria that permitted residential contractors to use alternative methods instead of conventional fall protection without having to demonstrate the infeasibility or greater hazard and without having a written site specific fall protection plan.

New Residential Fall Protection Guidelines

In June 2011, upon recommendations from several parties including the National Association of Home Builders, federal OSHA changed the guidelines used to enforce the fall protection provisions which MIOSHA was required to adopt. The new compliance criteria still allows for an employer to develop a fall protection plan that uses alternative methods to conventional fall protection but with some key changes.

The fall protection plans must now be site specific, written down, developed by a qualified person, implemented by a competent person, and be available on-site. The **written plans must also now include the reasons why conventional fall protection is infeasible or poses a greater hazard** and must identify each job-site location where conventional fall protection will not be used.

The anticipated effective day for the changes is September 2012. A link to the "Updated Enforcement Policy for Residential Construction Fall Protection" is in the spotlight section of our website, www.michigan.gov/miosha.

Residential Fall Protection Forum

In true connecting fashion MIOSHA approached the task of implementing these changes by collaborating with the regulated community. We understood the resi-



Bart Pickelman, CIH
Deputy Director

dential construction industry needed to hear ideas and see examples of how to set-up feasible fall protection systems from those in the business of building and renovating houses.

To help residential contractors comply, MIOSHA sent informational letters to over 8,500 residential builders and trade contractors, and provided more than 70 seminars across the state. MIOSHA also reached out to the residential construction industry for their assistance with a **Residential Fall Protection Forum held March 29th**. The purpose of the forum was to provide real solutions and best practices for complying with the revised residential fall protection requirements.

Working together we showed feasible methods for installing conventional fall protection systems that are not extremely costly or time consuming to utilize. In addition, in the instances where conventional fall protection systems are infeasible or create a greater hazard, the forum provided examples of effective fall protection plans that comply with the new enforcement requirements.

The forum was sponsored by the *Michigan Association of Home Builders*, the *Greater Lansing Home Builders and Remodelers Association*, and MIOSHA. Forum presenters included: **Titanus Cement Wall Co.**, **Universal Forest Products**, **Sherriff-Goslin Roofing**, and **Independent Framing, Inc.** The forum also included vendors for fall protection systems, ladders, and scaffolding, who were on hand to demonstrate their products. We'd like to thank all parties for their participation in the forum.



Recording Work-Related Injuries and Illnesses

Accurate recordkeeping is a critical component of an employer's total safety and health effort. Here's why:

- Conscientious and detailed records can provide employers with a clear picture of their work environment.

- Injury and illness data can help identify problem areas.

- Employers can better administer company safety and health systems with accurate records.

As employee awareness about injuries, illnesses, and hazards in the workplace increases, employees are more likely to follow safe work practices and report workplace hazards.

Who is covered by MIOSHA's recordkeeping rule?

Employers with 11 or more employees are covered by MIOSHA's recordkeeping requirements. Employers can review Part 11, *Recording and Reporting Occupational Injuries and Illnesses*, to see exactly which cases to record.

If you had 10 or fewer employees during all of the last calendar year or your business is classified in a specific low-hazard retail, service, finance, insurance, or real estate partially exempt industry, you do not have to keep injury and illness records, unless MIOSHA, the Bureau of Labor Statistics (BLS), or the United States Department of Labor (OSHA), informs you in writing, that you must keep records.

These exemptions apply to recordkeeping only, and do not excuse any employer from other MIOSHA requirements, or from compliance with all applicable MIOSHA safety and health standards.

MIOSHA also notifies selected establishments each year to report data requested by OSHA, as well as the Bureau of Labor Statistics (BLS). If employers receive a BLS Survey or an OSHA Data Collection Form, they must promptly complete the form and submit via mail or electronically to MIOSHA within 30 days.

What is the basic recording requirement?

Each employer is required to keep records of work-related fatalities, injuries and illnesses that meet one or more of the general recording criteria, including:

- Death,
- Days away from work,
- Restricted work,
- Transfer to another job,
- Medical treatment beyond first aid,
- Loss of consciousness,
- A significant injury/illness diagnosed by a physician or other licensed health care professional.

How do I determine if a case is work related?

A case is considered work-related if an event or exposure in the work environment either caused or contributed to the resulting condition. A case is considered work-related if an event or exposure in the work environment significantly aggravated a pre-existing injury or illness.

How do I separate first aid from medical treatment cases?

Medical treatment means the management and care of a patient to combat disease or disorder. It includes treatment of injuries administered by physicians, registered professional personnel, or lay

persons (i.e., non-medical personnel).

Medical treatment does not include first aid treatment (one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care) even though provided by a physician or registered professional personnel.

What are the three required forms?

You must use the following or equivalent forms:

- Use the *MIOSHA Form 300 Log of Work-Related Injuries and Illnesses*, to list injuries and illnesses and track days away from work, restricted or transferred.

- Use the *MIOSHA Form 301 Injury and Illness Incident Report*, to record supplementary information about recordable cases.

- Use the *MIOSHA Form 300A Summary for Work-Related Injuries and Illnesses*, to show totals for the year in each category along with employees and hours worked.

Employers must enter each recordable injury and illness on the *MIOSHA Forms 300 and 301* within seven calendar days of receiving the information that an injury or illness has occurred.

Which of the forms am I required to post?

Employers must post only the *MIOSHA Form 300A Summary* of the previous calendar year from February 1 to April 30. Companies with no injuries or illnesses in the previous calendar year must certify and post the 300A with zeros on the total line.

How do I record a work-related injury or illness that results in days away from work?

When an injury or illness involves one or more days away from work, you must record the injury or illness on the *MIOSHA Form 300* with a check mark in the space for cases involving days away ("H" column) and an entry of the number of calendar days away from work in the number of days ("K" column). You must also check the appropriate entry (1-6) in the "M" column.

If the employee is out for an extended period of time, you must enter an estimate of the days that the employee will be away, and update the day count when the actual number of days is known. The standard relies on calendar days instead of workdays. Count calendar days away from work, including holidays and weekends; instead of scheduled work days. Do not count the day of the injury or illness, or the day the employee returns to work. Employers may "cap" the total days away from work (including days of job transfer or restriction) at 180 calendar days.

How do I record a case that results in restricted work or job transfer?

When an injury or illness involves restricted work or job transfer but does not involve death or days away from work, you must record the injury or illnesses on the *MIOSHA Form 300* by placing a check mark in the space ("I" column) for job transfer or restriction and an entry of the number of restricted or transferred days in the "L" column. You must also check the appropriate entry (1-6) in the "M" column.

Employers are required to record cases as restricted work cases when the injured or ill employee only works partial days or is restricted from

performing their "routine job functions." If an employer makes a permanent job transfer, stop counting the restricted days and enter the total number of days lost on the log. (This must be at least one day.)

Are company parking lots considered part of the employer's work premises?

The rule includes company parking lots and access roads in the definition of "establishment."

Once the employee is out of the vehicle, injuries and illnesses occurring in parking lots and on access roads are considered work-related. These cases must be recorded on the company's log if they meet the other recording criteria. The rule excludes injuries and illnesses occurring while employees are commuting to or from work.

Are motor vehicle accidents recordable?

Motor vehicle accidents that are work-related are recordable. A motor vehicle accident is: a motor vehicle vs. a motor vehicle, or a motor vehicle vs. a person. A motor vehicle accident that occurs in the company parking lot or on the company access road is not recordable if the injury occurred during the employee's commute.

Must all fatalities be reported within eight hours to MIOSHA?

YES. An employer is required by law to notify MIOSHA within eight hours of a fatality or any hospitalization of three or more employees suffering injury or illness from an accident. Heart attacks at work which result in a fatality fall within the reporting requirements. A special telephone line for reporting fatalities and multiple hospitalizations is available 24 hours a day by calling 800.866.4674.

How can I get more information on recordkeeping?

If you encounter recording problems use good sound judgment and record the case under what you feel is the proper category. A case that is recorded under the wrong category can easily be corrected. The important thing to remember is to **record any case you feel might be recordable; afterwards seek clarification and assistance.**

For detailed information on the recordkeeping standard and forms, check the "Recordkeeping & Statistics" section on our website www.michigan.gov/miosha, or call the MIOSHA Management Information Systems Section at 517.322.1848. For information on recordkeeping seminars and other training opportunities call the CET Division at 517.322.1809.

The screenshot shows the LARA website interface. The main heading is "Department of Licensing and Regulatory Affairs". Below it, there's a search bar and a list of search results. The first result is "Recordkeeping Forms & Guidelines" with a link to "MIOSHA Form 300 Log of Work-Related Injuries and Illnesses". Other results include "MIOSHA Form 301 Injury and Illness Incident Report" and "MIOSHA Form 300A Summary for Work-Related Injuries and Illnesses". The page also features a navigation menu on the right with links like "Home", "About LARA", "Contact Us", etc.

Patty Meyer, Director
Construction Safety &
Health Division
517.322.1856

Construction Demolition and Renovation Projects

By: Patty Meyer, Director

The construction outlook in Michigan is showing some signs of growth; mostly in the health care and education sectors, and office space retrofitting. However, many of the projects continue to be renovations and additions of existing structures, not new building construction.

The Construction Safety and Health Division focuses inspections on projects with the highest potential of serious hazards. For **safety** the most serious hazards are: falls, electrocution, struck by, and crushed by. For **health** the most serious hazards are: asbestos, lead, cadmium, isocyanates, and noise.

Two types of projects where all these hazards are more likely to be present are demolition and renovation projects. This includes a variety of projects, i.e. bridge, road and utility reconstruction; plant dismantling; shopping center demolition; power house decommissioning; and office building renovations.

MIOSHA Demolition Standards

MIOSHA has a specific construction safety standard for demolition work, Part 20, *Demolition*. Rule 2031 (1) requires an engineering survey be conducted by a competent person knowledgeable in demolition **before demolition work is performed**.

The competent person must determine the condition of the foundation, roof, walls, and floors; whether any adjacent structure would be affected by the demolitions; evaluate the utility services entering the building; and any other conditions and equipment that could affect the safety of an employee.

There are also specific requirements for conducting an exposure assessment in several health standards. Part 603, *Lead in Construction*; Part 602, *Asbestos*, and Part 309, *Cadmium*; **require an initial exposure assessment prior to any work being performed**. The requirement to conduct an exposure assessment for lead and cadmium were two of the most frequently cited health rules in FY2011.

Contact the Construction Safety and Health Division with any questions at 517.322.1856. For questions concerning asbestos, contact the Asbestos Program at 517.322.1320 or go to their website at www.michigan.gov/asbestos.



Gate Strength Requirements for Snaphooks

By: Felix Acevedo, Safety Supervisor

MIOSHA has received several questions asking if we will enforce the General Duty Clause for the newer ANSI Z359.1-2007 standard, which sets forth a 3,600-pound, gate compressive strength test on snaphooks (which includes carabiners) that are a component of a personal fall arrest system. **This ANSI standard does not apply to construction operations.**

Part 45, Fall Protection

Part 45, *Fall Protection*, 1926.502(d)(3&4) requires all personal fall arrest system equipment to have a minimum *tensile* strength of 5,000 pounds and be proof-tested to a minimum *tensile* load of 3,600 pounds without cracking, breaking, or taking permanent deformation. However, Part 45 does not address the *comprehensive* strength of snaphooks, which is an important safety consideration. Without sufficient compressive strength the gate of the snaphook can open, the personal fall arrest equipment can detach from its anchorage, and the employee wearing the equipment can fall. Snaphooks must be compatible with the object that they are attached to in order to eliminate the possibility of a condition that could side

load the gate and cause a failure or roll out condition.

ANSI A10.32-2004

The requirements for comprehensive strength of snaphooks for personal fall arrest equipment used for construction operations are found in *ANSI A10.32-2004, Fall Protection Systems – American National Standard for Construction and Demolition Operations*. ANSI A10.32-2004, Sec. 4.5.3 states that snaphooks or carabiners shall be capable of withstanding a minimum load of 220 pounds without the gate separating from the snaphook or carabiner body by more than 0.125 inch and be capable of withstanding a minimum side load of 350 pounds without deforming by more than 0.125 inch.



Asbestos Abatement Accreditation On-Line Renewal Payment

By: Tony Casaletta, Asbestos Program Manager

The MIOSHA Asbestos Program is pleased to announce that the MIOSHA Asbestos Abatement Accreditation On-Line Renewal Payment System is officially live! Every year the Asbestos Program handles an average of 3500 accreditation renewals from individuals throughout the country. Since the inception of the program, all these renewals were mailed in; envelopes were opened manually; and the checks processed by hand.

Our customers now have a much more convenient feature that allows them to renew on-line using most major credit cards. The billing is electronic and the system automatically updates the individual's information in the Asbestos Management Information System. Since going live on January 26, 2012, the on-line renewal system has assisted 65 customers in renewing their accreditations. The Asbestos Program is confident this number will increase as the word spreads throughout the industry about the on-line renewal system.

The on-line renewal system is just the first step in a multi-phase project the Asbestos Program is looking to participate in. Eventually the Asbestos Program would like to expand their on-line services to include all accreditation applications, notifications and submission of notification fees, and penalty payments.

The on-line payment system can be accessed from the MIOSHA Asbestos Program website: www.michigan.gov/asbestos.

ROOFER – FALL

In June 2011, a 43-year-old roofer was working alone on a residential project. When other employees arrived they found him lying on the ground near the ladder used to access the 24 ft. high roof. The ladder did not extend 3 feet above the roof, but was restrained. The employee later died from injuries determined to be consistent with falling from heights.

MIOSHA Violations:

- Part 1, *General Rules*, Rule 408.40114(1) – The accident prevention program did not address fall protection.

- Part 11, *Fixed and Portable ladders*:

- Rule 408.41112(1) - No safety training for ladders.

- Rule 408.41124(5) - Ladder did not extend 3 feet above landing.

CASE SUMMARIES

PLUMBER – ELECTROCUTION

In July 2011, a 60-year-old plumber was electrocuted while working in the crawlspace of a home. The employee was using a reciprocal saw to remove a waterline and contacted a 120 volt electrical conductor (NM-Romex). The saw, extension cord, and GFCI being used were in good working condition. The electrical conductors in the crawl space showed signs of damage.

MIOSHA Violations:

- Part 17, *Electrical Installations*

- Rule 408.41724(2) - No inspection to detect electrical hazards.

- Rule 408.41724(3) - Employee working near electrical hazards without the hazard being eliminated.

MIOSHA Adopts NEP on Primary Metal Industries

By: Sundari Murthy, CIH, Safety & Health Manager

Federal OSHA implements a National Emphasis Program (NEP) when high-risk hazards are identified in certain industries. In 2011 federal OSHA implemented an NEP on Primary Metal Industries. This was based on the seriousness and frequency of worker exposure to health and safety hazards found in this industry during OSHA's previous inspections. The goal of the NEP is to identify and reduce or eliminate the hazards in this industry. In 2011, MIOSHA adopted this NEP and the associated federal OSHA compliance directive, CPL 03-00-013 National Emphasis Program - Primary Metal Industries.

Outreach Activities

The NEP on Primary Metal Industries entails both outreach activities by MIOSHA's Consultation, Education and Training (CET) Division and enforcement activities by the General Industry Safety and Health Division (GISHD). CET's activities include heightening health and safety awareness in this industry through publications, presentations, partnerships/alliances with employers/employees, and on-site consultation services for employers upon request. These activities would enable employers to voluntarily take steps to correct hazards and comply with current safety and health regulations and practices.

Enforcement Activities

GISHD's enforcement activities involve inspection of facilities in the primary metal industry, primarily by Industrial Hygienists (IH). The IHs during their inspections, will review illness and injury records, and evaluate the production process for engineering controls and work practices. They will also assess worker exposure to air contaminants, noise and heat stress; review house-keeping and hygiene practices; and determine compliance with applicable standards listed in the article on this page on high hazard industries.

OSHA also has NEPs for Hexavalent Chromium, Lead and Crystalline Silica which are applicable to this industry.



Adrian Rocskay, Ph.D., CIH
Director, General Industry
Safety & Health Division
517.322.1831

High Hazard Industry Focus

By: Mark N. Scott, Industrial Hygienist Specialist

Primary Metal Manufacturing (NAICS 331) is one of the 13 high-hazard industries targeted by GISHD for enforcement during 2009-2013 because of high injury and illness rates. The nonfatal occupational injury and illness incidence rate among private industry employers in 2010 was 4.2 cases per 100 full-time workers, compared to 7.9 for this industry.

Establishments in the primary metal manufacturing are involved in extracting and refining metals from rocks containing iron, lead, nickel and tin, among other elements. Among these establishments are those that manufacture nails, insulated wires and cables, steel piping, and copper and aluminum products.

Metal Manufacturing Hazards

Lead is widely used in this industry and is of great concern due to health hazards. Worker exposure to lead occurs in at least 120 different occupations, including lead smelting, lead storage, battery manufacturing, and lead pigment and solder manufacturing. Lead is highly toxic and affects kidneys, reproductive system, and nervous system.

In addition to lead, workers are exposed to carbon monoxide, silica, formaldehyde, air contaminants, other toxic metals, noise and heat hazards. These hazards can affect workers' well being, eyes, nose, throat, lungs, skin, and can cause difficulty breathing and chest and joint pain. Overexposures can also lead to death.

Workers are also exposed to serious safety hazards, like falls from elevated surfaces, crushing in material storage/scrap metal handling areas, sprains and strains from handling heavy materials, cut/crush/impale hazards from moving machinery, burns when dealing with hot metal and slips/trips/falls from bad house keeping practices. The equipment and materials used in this industry can also expose workers to falling objects, flying particles, pinch points, and electrical hazards.

The standards applicable to this industry include: Safety standards Parts 23, 24, 26, 33, 42, 44, 85; and Health standards Parts 301, 306, 308, 309, 310, 380, 430, and 451.

These standards, and publications related to the hazards, are located on the MIOSHA website at www.michigan.gov/miosha.



Personal Protective Equipment for Power Groundskeeping

By: Robin Spaulding, Safety & Health Manager

With activities already starting for using power groundskeeping equipment and the tasks to be performed, the choice of correct personal protective equipment must be reviewed. Both employers and employees should know and be familiar with MIOSHA Part 54, *Powered Groundskeeping Equipment*, and its requirements for using personal protective equipment (PPE) with the groundskeeping equipment.

The following information is what the qualified operator must use when operating equipment:

- Safety face shields, goggles, safety glasses to protect from chemical splash, dust or flying particles.
- Appropriate hearing and respiratory protection where required.
- Head protection when working under low branches, or where flying or falling objects could be present.
- Gloves should be selected based upon the task to be performed.
- Properly fitting, long-or short sleeved shirts and long pants are best to prevent injuries from the sun and also from scratches and bits.
- High-top shoes or boots with toe protection should also provide protection to workers' toes, feet and ankles.

CASE SUMMARIES

PIT OPERATOR – STRUCK BY

A 45-year old powered industrial truck (PIT) operator stepped off his hi-lo truck to investigate a problem on the receiving dock. The employee was hit by a load being carried on another powered industrial truck. The employee's right leg and foot were pinched between his powered industrial truck and load of the second PIT. The employee lost consciousness and became unresponsive. A supervisor called 911 and the employee was transported to a local hospital. He later died at the hospital.

MIOSHA violation:

- Part 21, *Powered Industrial Trucks*, Rule 2185 - Driver operating a powered industrial truck with a load obstructing the operator's vision.

WELDER – PINNED BETWEEN

In June 2011, a 52-year-old employee was welding inside a cylindrical tank that was sitting on powered feed rolls. The employee exited the tank while it was still turning. He was pinned between the tank and the roller, sustaining fatal injuries.

MIOSHA violations (not inclusive):

- Part 1, *General Provisions*:
 - Rule 33(1) - No on/off switch for pendant control used to rotate tank sitting on set of rollers.
 - Rule 33(3) - Pendant control to roller did not identify control functions.
- Part 12, *Welding and Cutting*:
 - Rule 1213(3) - No testing of atmosphere prior to entry.
 - Rule 1213(5) - No effective communication between welder and attendant.

Nella Davis-Ray, Director
 Consultation Education &
 Training (CET) Division
 517.322.1809

Best Practice: Sherwin Williams, Holland

By: Doug Kimmel, MVPP Program Specialist

Founded in 1866, The Sherwin-Williams Company is a world leader in the manufacture, development, distribution and sale of coatings and related products to professional, industrial, commercial, and retail customers.

The Holland site employs 166 workers and is a packager of aerosol paints, and industrial and consumer products for the home and automotive markets. The site's outstanding safety and health management system has been recognized through their participation in the Michigan Voluntary Protection Program as a Star site.

Glove Vending Machine

Management is committed to the safety and health of all employees and is always open to new ideas. Demonstrating their commitment, five members of the site's Central Safety Committee (CSC) attended the 2011 Michigan Safety Conference. While in the vendors exhibit, some CSC members noticed a vending machine for gloves. They brought the idea to management, who made a commitment to try the machine and within seven months it had paid for itself. Employees now have unlimited access to gloves.

Photo of the Week

Knowing that a picture is worth a thousand words, the site has imple-



The "Glove Vending Machine" provides employees with unlimited access to gloves.

mented a "Photo of the Week" program. Photos related to EHS, both on and off the job, are provided by employees or obtained from the web or other sources. The photos are posted on communication boards that are located throughout the plant. They are a great conversation piece at shift kickoff meetings.

Reward and Recognition Program

The site's proactive, informal 'Reward & Recognition' program is another key safety promotion tool. The program is designed to reward employee participation in proactive EHS activities such as safety audits, risk assessments, submitting topics for the weekly newsletter, etc. A "Reward & Recognition" cabinet is stocked with things like insulated coffee mugs, jumper cables, barbeque tool sets, flashlights, baseball hats, and even golf balls with the company logo. Although many of the items are simple and inexpensive, the employees appreciate being recognized for their safety efforts. Site Safety Director, Brian Sitz recommends that rewards be kept to the \$5-10 range and changed with the seasons.

Safety Challenges

Another way that safety is kept "fresh" is through the use of "Safety Challenges." One example is safety crossword puzzles. The crossword puzzles are developed based on the information provided during monthly safety training sessions, such as "PPE and Fire Resistant Clothing," which was the topic for January. To further promote this safety topic the Safety Director challenged employees to bring him an "athletic gray," 100% cotton t-shirt (100% cotton undergarments are required for certain types of work where there may be a flash or burn hazard). A steak dinner was offered to all employees that could find one and bring it to him.

Management at Sherwin Williams remains committed to safety and health and ensuring that all employees are engaged.

MIOSHA Awards

03/06/12—Huntsman—Auburn Hills—Platinum Award. The Huntsman Auburn Hills facility has gone more than 15 years without a lost time accident. MIOSHA Director Martha Yoder and CET Division Director Nella Davis-Ray presented the award to Auburn Hills EHS Manager Pete Panourgias and Auburn Hills Commercial Director Greg Pelts.



On February 27, 2004, the Auburn hills facility received the Michigan Voluntary Protection Program (MVPP) Star Award for workplace safety and health excellence. The company received renewal of its Star Award in 2007 and 2011. This is the most prestigious safety and health award given in Michigan. Huntsman Polyurethanes, an international business unit of Huntsman International LLC, produces chemicals and systems for customers in a wide range of industries.

Employer Honor Roll

03/01/12—IHC Inc.—Detroit—SHARP Award

02/10/12—Midwest Rubber—Deckerville—Gold Award

12/16/11—Magna International—Newaygo—Ergonomic Innovation Award

New DVD Titles in the Free-Loan Library

The CET Division DVD/Video Library has more than 350 titles available on a free-loan basis. We recently purchased more than 30 new titles, including:

- Cell Phones in the Workplace: A Dangerous Distraction,
- Using Ladders Safely,
- PPE: Wear It for You,
- Fall Protection: Make the Connection,
- Hazard Communication: Informed for Safety,
- Heat Stress: Working Safely in Hot Environments.

Last year MIOSHA loaned more than 1,800 videos. The video catalog is online at www.michigan.gov/mioshavidoes.

Take a Stand Day

Who: Employers are invited to "Take a Stand" for safety and health.

When: Wednesday, August 8th.

What: More than 125 MIOSHA compliance and consultation staff will visit Michigan worksites.

- These visits will focus on specific hazards/areas requested by the employer.
- There will be **NO CITATIONS** and **NO PENALTIES** for participating workplaces.
- Participants must agree to correct all serious conditions.

How: To schedule a visit contact the CET Division:

- Call the Lansing office at 517.322.1809.
- Register online at www.michigan.gov/mioshatasd.
- Submit your request by **July 25th**.

1,500 employers have participated in "Take a Stand Day" since 2005.



(Left) Clark Construction, Chrysler Arena, Ann Arbor, and (Right) Maple Valley Plastics, Brown City, participated in "Take a Stand Day" in 2011.

MIOSHA CET Division Services

To learn more about the free services offered by the MIOSHA CET Division:

- Call the Lansing office at 517.322.1809 or 800.866.4674.
- Submit a request for services electronically at www.michigan.gov/cetrca.
- Visit the CET Division website at www.michigan.gov/cet.

Dawn C. M. Jack, Director
 Appeals Division
 517.322.1297

Asbestos Settlement

By: Dawn C. M. Jack, Appeals Division Director

In December of 2011, MIOSHA reached a settlement with GRL Properties, LLC of Grand Rapids, Michigan for multiple serious and willful asbestos violations.

The violations resulted from a MIOSHA investigation into allegations that asbestos insulated piping was being removed improperly by a tenant of the John Bean Building in Lansing. The investigation prompted MIOSHA to also examine the building owner, GRL Properties LLC, for compliance with its obligations under the Asbestos standard.

The MIOSHA investigation found the building was not completely inspected for asbestos, and the building inspection information the building owner had was not conveyed to employees working in the facility or tenants occupying the facility.

MIOSHA Violations & Penalties

GRL Properties received a total of three alleged willful violations. A willful violation is one committed with an intentional disregard of the requirements of MIOSHA regulations, or plain indifference to employee safety and health. The violations included:

- No notification of the presence of asbestos to employees;
- No notification of the presence of asbestos to contractors or tenants; and
- No training provided to employees performing housekeeping operations in a building containing asbestos.

The company also received five alleged serious violations. A serious violation exists where there is a substantial probability that serious physical harm or death can result to an employee from the exposure. Some of those violations included:

- No complete asbestos survey;
- Proper isolation controls not used; and
- Proper decontamination not provided.

GRL Properties LLC, GRL Properties Management Company LLC, and their other affiliated companies were also found to have citation histories involving asbestos violations. The total proposed penalties for the violations were \$115,000.

Settlement Agreement

The company exercised its appeal rights afforded under the MIOASH Act. Following a prehearing conference with the Appeals Division, MIOSHA and GRL Properties LLC reached a settlement agreement. Under the settlement, the company accepted all violations as originally classified, with a grouping of two of the willful violations. MIOSHA agreed to reduce the penalties from \$115,000 to \$46,000.

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

Ron Ray, Director
 Management & Technical
 Services Division
 517.322.1851

ORR Workplace Safety Recommendations

On March 12, 2012, the **Office of Regulatory Reinvention (ORR)** presented its report on recommendations for changes to Michigan's workplace safety regulations to Governor Snyder. The report consists of the final recommendations of the Workplace Safety Advisory Rules Committee (ARC) and the ORR.

Between June 20 and November 29, 2011, the Workplace Safety ARC held 12 meetings and conducted a systematic review of MIOSHA rules that exceed federal standards, as well as rules which were duplicative, obsolete, or unduly burdensome. MIOSHA staff assisted in the regulatory review. The report includes 624 recommended changes to 334 separate MIOSHA rules with rescission of 611 MIOSHA requirements and nine ORR recommendations.

ORR Recommendations

1. Eliminate the Construction Safety, General Industry, and Occupational Health Standards Commissions and assign the Director of LARA the responsibility for developing or revising standards with the support of advisory committees.
2. Amend the MIOASH Act to define a "clear and convincing need." The revised definition could potentially require an explanation of the unique characteristics of Michigan industry that necessitate unique regulation or allow for petition by a specific industry.
3. Update MIOSHA rules to comply with OSHA's Standards Improvement Project.
4. As long as a standard requires an employer to limit the use of the equipment to a trained and qualified employee to operate the equipment (as in R 408.11855), the separate rule within the standard specifying qualifications of the employee should be rescinded (as in R408.11851).
5. Engage with the agricultural community to evaluate the best way to regulate confined spaces in agricultural operations given that the relevant rules were accidentally rescinded.
6. Pursue a review of Occupational Health Standards Part 301, Air Contaminants; Part 601, Air Contaminants for Construction; and Part 622, Control Measures for Hazardous Atmospheres; once the federal government has completed its review.
7. Withdraw pending rule requests which include rules that exceed federal standards. If MIOSHA would like to update the existing rule set, they could proceed through the rule promulgation process within the confines of the federal standards.
8. Move all rule sets under the Michigan Administrative Code (except for those recommended for rescission).
9. Review the various Diving Operations standards to potentially combine all of them into one standard, which should not exceed federal standards.

The final report is on the LARA website, www.michigan.gov/lara, click on the Office of Regulatory Reform link. A full list of all rules recommended to be rescinded or amended are in the report.

NOTE: This report is not part of the rulemaking process. Any proposed changes to administrative rules recommended by this report will be made as part of the rulemaking process, and any proposed changes to Michigan statute will be made through the legislature.

Jack Finn, Director
 Wage & Hour Division
 517.322.1825

Helpful Hints to Avoid Wage Claims

From October 2011 through January 2012 there was a 17% rise in wage claims filed by workers. As part of our efforts to connect with our customers, the Wage & Hour Division has presented information at various employer organization meetings which can lessen or even eliminate employee wage claims.

Following is a synopsis of suggested practices that have been given to ensure compliance with the Payment of Wages Act.

- DO:
- Keep employment records on file for three (3) years.
 - Ensure payment of wages on a regularly recurring basis.
 - Create an employee handbook or written policies on fringe benefits that prevail during employment and at termination of employment.

- Provide either a written or electronic retainable pay statement noting hours worked, gross wages paid, itemization of deductions and dates for which the wages were earned.

DO NOT:

- Deduct from an employee's pay except those deductions required by law, a collective bargaining agreement or written authorization of the employee.
- Charge a fee or other consideration on hiring of an employee.
- Provide payment of wages other than by cash, check, money order, direct deposit, or adherence to the Payment of Wages Act's requirements for pay by a payroll debit card.
- Discriminate against or discipline an employee filing a claim, this is prohibited by the Act.

Michigan Department of Licensing and Regulatory Affairs
Michigan Occupational Safety & Health Administration
P.O. Box 30643
7150 Harris Drive
Lansing, Michigan 48909-8143

PRESORTED STANDARD
U.S. POSTAGE
PAID
LANSING, MI
PERMIT NO. 1200

MIOSHA TRAINING INSTITUTE (MTI)

MIOSHA Training Institute Successes

By: Sheila Ide, CET Supervisor

MTI Highlights

Since its launch in October, 2007 the MIOSHA Training Institute (MTI) has: trained **10,000** participants; developed **five** instructional tracks; awarded **442** certificates; and created **38** classes delivering training at more than **30** co-sponsor locations state-wide. The MTI continues to remain a popular training source at an affordable cost.

MIOSHA honored four of its Upper Peninsula MTI graduates at the *Upper Michigan Safety Conference (UMSC)* in Escanaba on January 27, 2012. A graduate ceremony is held each year at the *Michigan Safety Conference* in Lansing, and this is the first MTI recognition at the UMSC. MIOSHA Deputy Director **Bart Pickelman** presented the certificates.

MTI's first-ever "**Boot Camp**" scheduled for July 2012 filled up in a week! The three-week concentrated curriculum is targeted to new MTI students and will award a Level One General Industry certificate for those successfully completing the series.

Focus On Courses

Did you know the MTI currently offers **two compliance tracks** leading to Level Two certificates, one for **General Industry** and one for **Construction**? Classes were developed for MIOSHA standards that commonly affect most employers in both disciplines. These courses provide in-depth training on MIOSHA standards, fully explaining scope, definitions and rules contained in each

standard. Formal and informal exercises teach students how to read and interpret rules that apply to their work operations.

The *Personal Protective Equipment, Hazard Communication, Electrical Standards, and Respiratory Protection* standards courses have been combined to address all three disciplines of health, safety and construction, providing credit for students in each track. As some general industry standards offered are industry specific, the classes are divided into required and elective categories. Check the MIOSHA Training Calendar for specific topics and locations.



MIOSHA Deputy Director Bart Pickelman recognized MTI graduates at the 2012 UMSC: Renee Lundberg, Bay College, Escanaba; David Talford, Engineered Machined Products Inc., Escanaba; and Jon Nagy, Manistique Paper Co., Manistique. (Not pictured: Robert Page, MTU, Houghton.)

MTI website: www.michigan.gov/mti



Director: Martha B. Yoder
Deputy Director: Barton G. Pickelman
Editor: Judith M. Shane

MIOSHA Hotline: 800.866.4674
Fatality Hotline: 800.858.0397
General Information: 517.322.1817
Website: www.michigan.gov/miosha

**The Mission of the MIOSHA Program is:
To Protect Employee Safety, Health
and Worker Rights.**

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.

The Department of Licensing and Regulatory Affairs (LARA) is an equal opportunity employer/program. Auxiliary aids, services and other reasonable accommodations are available upon request.

Website: www.michigan.gov/lara
(22,000 copies printed at \$4,769 or \$0.22 per copy.)

PLEASE ADD UNION BUG AND RECYCLE LOGO!!