



MIOSHA NEWS

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Michigan Sugar Partnership

Michigan Sugar Company; the Bakery, Confectionery, Tobacco Workers, and Grain Millers International Union (BCTGM) Locals 259-G, 260-G, 261-G, 262-G, and 263-G; and MIOSHA; signed a formal partnership on May 21st to improve worker safety and health at Michigan Sugar facilities.

Safety & Health Commitment

The leadership of MIOSHA, Michigan Sugar Company, and the BCTGM are committed to providing Michigan Sugar employees with a safe and healthy workplace and each party will demonstrate leadership, responsibility and accountability in furthering worker safety and health at all levels.

"We are very pleased today to sign this formal partnership, which says we will all work together to make worker safety the number one priority at all Michigan Sugar facilities" said MIOSHA Director Doug Kalinowski. "This proactive agreement provides a dynamic approach where everyone is focused on creating work environments that foster worker protections."

"Michigan Sugar Company is committed to the safety and well being of our employees," said Jim Ruhlman, VP of Administration. "We look forward to working collaboratively with our union leadership and our state agencies in bringing our health and safety programs to the next level."

"After the company approached the

factory unions about being a partner in the MIOSHA agreement, there were many questions. But after meetings with MIOSHA representatives and amongst the Locals, we have decided to proceed with cautious optimism," said Barry Broeckert, President Local 262-G and Inter-Factory Chairman.

New Proactive Strategy

The purpose of the partnership is to reduce worker injuries and illnesses at Michigan Sugar locations by building a relationship based on mutual respect and trust that channels the resources and talents of all the parties to anticipate, evaluate and control the safety and health hazards in Michigan Sugar facilities.

Sharing safety and health information between all partners is a key component of the agreement, and will help identify emerging issues in the food processing industry. This agreement represents a new strategy that will emphasize proactive measures to ensure a safe and healthy work environment. During the implementation period, MIOSHA will use both consultation and compliance staff.

The partners agree to target the reduction of the MIOSHA log summary data at each location through a non-adversarial relationship that maximizes the strengths and resources of all parties. Michigan Sugar has had a formal safety and health program employing safety and health professionals for more than 20 years, which includes all elements of applicable MIOSHA standards.

Employees bring valuable skills and perspectives to the development stage of a partnership and their participation is essential. Employee and union involvement in the day-to-day implementation of worksite safety and health management systems and other partnership activities is required.

Partners for Safety

MIOSHA inspections to investigate employee complaints, serious injuries or fatalities, and national or state emphasis programs are not precluded by this agreement. Michigan Sugar worksites selected for general schedule inspections from the MIOSHA inspection targeting list will receive a focused inspection.

The focused inspections will include an evaluation of the 11 inspection protocols listed in the agreement. The protocols address hazards specific to the food processing industry that are most likely to cause serious injuries. They include ergonomics, energy control lockout/tagout, confined space entry and rescue, hearing conservation, machine/equipment guarding, personal protective equipment (PPE), chemical safety training (hazard communication), powered industrial trucks, fall protection, electrical safety, and emergency preparedness.

Michigan Sugar Company was formed in 1906 when six independent, single factory, sugarbeet companies merged. Today, Michigan Sugar has four operating factories (Bay City, Caro, Croswell, and Sebawaing) in Michigan and three warehouse terminals located in Michigan and Ohio, employing 450 year-round and 1,200 seasonal workers. Michigan Sugar Company is the fourth largest beet sugar processor in the United States, annually producing nearly one billion pounds of sugar under the Pioneer and Big Chief brand names, and generating over \$300 million in direct economic activity.

The Bakery, Confectionery, Tobacco Workers, and Grain Millers (BCTGM) International Union represents more than 100,000 working men and women in the U.S. and Canada. Safe working conditions are a major priority for the BCTGM. The BCTGM is affiliated with the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO).

Partnering for Safety

Partnerships embrace collaborative agreements that provide the opportunity to create safe and healthful workplaces using nontraditional strategies.

Partnerships are an important emphasis in MIOSHA's Strategic Plan and include individual employers, workers, trade organizations, and associations.

Core elements of MIOSHA partnerships include:

- Clearly defined goals and strategies,
- A measurement system to track progress,
- Self-sustaining Safety and Health Management Systems,
- Employee involvement,
- Stakeholder involvement, and
- MIOSHA enforcement incentive.

Current Partnerships: General Industry

05/21/08 – Michigan Sugar Company and BCTGM Locals 259-G, 260-G, 261-G, 262-G & 263-G

06/11/07 – Ford Motor Company, ACH and United Auto Workers (Renewal)

Current Partnerships: Construction

04/14/08 – Kamminga & Roodvoets – Road Construction Project in Kent County

09/19/07 – Detroit Edison Monroe Power Plant – Environmental Controls Construction Project

09/06/07 – Barton Malow/Skanska – Beaumont Hospital Troy Expansion

01/26/07 – The Christman Company – Michigan Street Development Project in Grand Rapids

05/03/06 – Walbridge Aldinger/Barton Malow – Detroit Metro Airport North Terminal Project

Collective data from the 2007 and 2006 construction partnerships indicates two million work hours without a lost time injury!



The agreement was signed by officials from each of the partners at the Bay City headquarters.



Michigan Department of Labor & Economic Growth



Doug Kalinowski, CIH
Director

Proactive MIOSHA Initiative

We didn't start the "Connecting MIOSHA to Industry" initiative to generate compliments or positive feedback. Nonetheless, it was very gratifying and a testament to all MIOSHA staff to hear the comments made by Patrick "Shorty" Gleason, President of the Michigan Building and Construction Trades Council and a MIOSHA Commissioner, at the June 11th meeting of the Construction Safety Standards Commission.

Commissioner Gleason said the

"I am very positive about the ability of employers, workers and MIOSHA to work together to keep men and women safe on construction jobsites," said Shorty Gleason.

mindset of the agency has evolved and changed a great deal. He complimented everyone for their efforts to be proactive and to help people. He said he was very impressed with the effectiveness of MIOSHA's work to share information while maintaining a proactive enforcement presence.

He also said that what's happening in the agency is very helpful. He is in regular contact with the employer community and legislators, and the employer community is reacting differently to MIOSHA. He said when he meets with legislators and explains how MIOSHA is functioning today; he can see a shift in their perception.

Commissioner Gleason expressed strong support for the MIOSHA Partnership program. In his estimation, this has been the best thing that has happened for the construction industry.

The ultimate goal of "Connecting" is that everyone – employers, workers and MIOSHA – recognize a shared responsibility for workplace safety and health.

Protection from Hazards

This issue of the MIOSHA News includes information on the death of

a 19-year-old construction worker/carpenter who fell over 60 feet while working on an apartment building being constructed on the Wayne State University campus in Detroit. This tragic fatality could have been prevented.

The MIOSHA inspection determined there were five contractors at the site that had been working on or near the roof openings and were aware of the fall hazards. Every contractor should take responsibility to control or eliminate hazards on the jobsite.

The MIOSHA requirement for an Accident Prevention Program, together with a strong overall safety and health system, are intended to help ensure workers go home safe every day. The safety and health systems at this worksite somehow failed.

We Will Do Our Part

We know that effective safety and health systems DO work and

require that EVERYONE share in the responsibility – beginning with strong management leadership. This is clearly shown with the formal partnerships MIOSHA has with the contractors and building trades on a number of large construction sites.

The goal of each MIOSHA partnership is enhanced safety and health protection and zero injuries for workers.

Data from four MIOSHA construction partnership projects – **Walbridge-Barton Malow/Detroit Metro Airport North Terminal Project**, **The Christman Company/Michigan Street Development/Grand Rapids**, **Barton Malow-Skanska/Beaumont Hospital/Troy**, and **Detroit Edison/Monroe Power Plant** – have worked nearly **two million work hours without a lost time injury!**

MIOSHA has information and training available to help create safety and health systems. If you need assistance with a work-related safety issue, contact us! We will do our part to help everyone have the tools and knowledge to "Make a Difference" for Michigan's working men and women. ■

24/7 Access to Consistent Information

Feedback from employers and workers continues to emphasize the need for access to useful information on MIOSHA requirements. Feedback also suggests that our information, our staff, and our expectations need to be consistent.

Consistency is desired among staff, divisions, and information distributed. One of the strategies MIOSHA has implemented to address consistency is a uniform system for publishing official agency guidance in the form of "Agency Instructions." Instructions provide guidance for MIOSHA staff and are useful documents for employers and workers.

New Instructions Issued

MIOSHA has issued instructions clarifying requirements such as Fall Protection for Construction, Hazard Communication, Permit Required Confined Spaces, Emergency Eye Wash/Shower Equipment, and Recording of Occupational Injuries and Illnesses.

Most recently, MIOSHA has issued one agency instruction covering three standards on Personal Protective Equipment: Construction Safety Standard Part 6; General Industry Safety Standard Part 33; and Occupational Health Standard Part 433. The instruction provides interpretive guidance on protection for eyes and face, head, body, and foot and/or toes. It also addresses issues of payment and replacement for PPE.

The instruction includes comprehensive appendices of all other MIOSHA standards that contain PPE requirements and a comparison of the Occupational Health standard and the General Industry standard.

MIOSHA Instructions are posted at www.michigan.gov/miosha; click on "Policies & Procedures," then



Top: Nearly 100 stakeholders gathered to review the proposed strategic plan.

Bottom: Stakeholders provided feedback on the goals and strategies of the plan. ■



Martha Yoder
Deputy Director

"Search for Instructions" and search for the topic, such as PPE.

MIOSHA Stakeholder Meeting

On April 27, 2008, nearly 100 key MIOSHA stakeholders gathered to review and comment on the proposed Strategic Plan for MIOSHA. The proposed plan covers Fiscal Years 2009-2013. Those gathered included employers, employees, organizations, unions, alliance and partnership partners, MVPP and MSHARP companies, CET grantees, and other government agencies.

DLEG Director Cooley kicked off the meeting by emphasizing the value of gathering all perspectives and the critical importance of honest feedback.

Discussion, ideas, and suggestions were exchanged during the session. Those attending were engaged and participated fully. The synergy was great and the meeting felt like a true partnership of purpose and mission – creating safe and healthful work environments.

All feedback from the session was compiled and incorporated in the strategies for implementation. A sample of the suggestions include:

- Dispel the myth that MIOSHA is getting its budget from fines.
- Provide MIOSHA information to workers early in their careers.
- Create case studies on accidents and fatalities.
- Maximize partnerships when developing new/revised regulations, policies, and programs.
- Simplify the MIOSHA website and make searching easier. Add more downloadable information.
- Focus on consistency. When staff is not consistent, it sends the wrong message.

We thank our valued stakeholders for their participation, input, honesty, and feedback. The program has greatly benefited from the inclusion of the important perspectives represented at this meeting.

Our next steps are to submit the draft plan to federal OSHA for review and approval; with implementation beginning October 1, 2008.

To view a summary of the plan, go to the MIOSHA website, and click on "Strategic Plan" in the "Highlight" section. ■

Fatal Fall at Detroit Construction Site

On June 23rd Michigan Department of Labor & Economic Growth (DLEG) Director Keith W. Cooley announced the Michigan Occupational Safety and Health Administration (MIOSHA) has cited five construction companies with \$40,350 in proposed penalties for allegedly failing to adequately protect employees from fall hazards.

Accident Background

On March 21st, Scott Austin, a 19-year-old carpenter working for TNT's Excavating Company was part of a crew working on a parapet wall on the roof of the five-story Studio One Apartment building being constructed on the Wayne State University (WSU) campus in Detroit. The wind picked up and employees were gathering tools and materials to ensure they were secure and would not blow off the roof.

Equipment curbs (sheet metal collars) used as a base for installing heating/ventilation/air-conditioning (HVAC) equipment were on the roof and some were covering roof openings. When Austin picked up an unsecured equipment curb to move it, he fell through the opening it was covering more than 60 feet to his death.

"This tragic workplace fatality could have been avoided. Five contractors had the responsibility to correct the hazards which led to the death of this young worker," said DLEG Director Cooley. "We are sending a clear message to all construction employers that they must be proactive and consistently protect their workers against fall hazards."

The MIOSHA Investigation

A typical construction site involves many contractors and sub-contractors, and the WSU construction project was no exception. On multi-employer sites, every employer has responsibility for the safety of all workers on the site, and more than one employer may be cited for the same condition.

The MIOSHA inspection determined there were five contractors at the site that had been working on or near the roof openings, were aware of the roof openings and that workers were exposed to the associated hazards. The contractors below were working at the WSU site at the time of the fatality:

- TNT's Excavating of Howell was working on the roof parapet wall.

- Houseman Construction Company of Grand Rapids was the general contractor at the site.

- Probuild of Delton LLC had a contract to perform carpentry work on the roof.

- Assemblers, Inc. of Pinckney did pre-cast concrete work around the roof openings.

- RJO Mechanical & Residential Plumbing of Portage was responsible for installing the HVAC equipment and the equipment curbs.

"It is not unusual for multiple contractors at a construction site to have their employees exposed to the same hazards. Each contractor at a site is responsible for ensuring that hazards are controlled or eliminated," said MIOSHA Director Doug Kalinowski. "Employers must exert all due diligence to identify hazards, whatever the cause, and take all necessary measures to protect their workers."

MIOSHA Violations

As a result of the accident investigation conducted by the MIOSHA Construction Safety and Health Division, five companies received citations for alleged safety violations with total proposed penalties of \$40,350. A serious violation exists where there is a substantial probability that serious physical harm or death can result to an employee.

MIOSHA concluded all five contractors had responsibility for the roof hazards that resulted in the fatality. Every employer was cited for failure to secure the roof covers and for failure to identify the roof covers. All contractors had a responsibility to implement the following requirements of MIOSHA Construction Standard, Part 45, Fall Protection:

- Cover or guard floor holes as soon as they are created during new construction.

- Survey the site before working and continually audit as work continues. Guard or cover any openings or holes immediately.

- Covers must be secured and color coded or marked with the words "HOLE" or "COVER."

- Construct all floor hole covers so they will effectively support two times the weight of employees, equipment, and materials.



Top: Employees were working on the parapet wall on the roof of this five-story building.

Bottom: These equipment curbs were not properly secured to protect employees from fall hazards.

Among the citations issued to TNT Excavating was a violation for inadequate fall protection training. At the time of his death, Austin had been on the job only three or four days and was a young, inexperienced worker. Young workers experience higher rates of work-related injuries according to the National Institute for Occupational Safety and Health (NIOSH). It's imperative that employers provide young workers with the information and skills to do the work safely. ■



First MTI Graduates - (Front) Jefferey Church, Corunna; Diana L. Head, Plainwell; Jessie L. Hamlin, Kalamazoo; Gwendolyn Gaston-Kelley, Warren; Jamie A. Sleight, Charlotte; Pamela Frink, Washington Township; Joylyn R. Stover, Jackson; Doug Kalinowski, MIOSHA. (Back) Dr. Richard McMillan, MCC; Kyle R. Frailing, Kalamazoo; Matthew A. Johnson, Plymouth; Michael G. Woolman, Center Line; Steven J. Westerfield, Lapeer. (Not pictured: Rumiko Takezawa, Farmington Hills; Susan L. Baker, Brighton.)

First MTI Graduates

Macomb Community College and MIOSHA recognized the first graduates of the MIOSHA Training Institute (MTI) on Tuesday, April 15th, at the 78th annual Michigan Safety Conference in Lansing.

Richard McMillan, Ph.D., Vice President for Economic and Workforce Development, Macomb Community College, and Doug Kalinowski, CIH, Director, MIOSHA Program, presented MTI Level I Certificates to 13 graduates. Currently there are 917 students from 330 companies registered in the MTI program, which provides a wide range of seminars with 28 cosponsors across the state.

"The MTI has quickly become the premier provider of high-quality workplace safety and health training," said Kalinowski. "The MTI offers participants the necessary knowledge and hands-on training for safety and health solutions."

Macomb and MIOSHA established a formal alliance on Sept. 26, 2005, to develop new opportuni-

ties to help protect the safety and health of Michigan workers. A key goal of the alliance was to establish the MIOSHA Training Institute, which launched certification classes in October 2007.

"As a leader in workforce development, Macomb College is pleased to partner with MIOSHA to heighten the importance of workplace safety and health practices," said McMillan. "By the end of our first year in September 2008, we expect to provide real-world safety training solutions to 1,600 individuals."

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

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

Emergency Requirements

By: Bob Pawlowski, CSHD Director

First aid and emergency preparedness is an essential component of every employer's Accident Prevention Program. No matter how effective that program may be; it wouldn't be realistic or wise to think an emergency or injury will never occur while working in the construction trades. Some injuries may only require a band-aid, while others may require assistance well beyond first-aid.

Employers must have a plan in place before beginning a project that addresses how the MIOSHA first aid and emergency requirements listed below will be met.

Construction Standards, Part 1, General Rules

- **Rule 114** requires employers to have an Accident Prevention Program that includes instruction and training of employees on working safely to prevent injuries or illnesses. The employer must also instruct their employees on procedures to be followed in case of an emergency.

- **Rule 132** has specific requirements for emergency preparedness, first aid training, and supplies. The requirements include ensuring the availability of medical personnel and ensuring provisions for prompt medical attention in case of serious injury.

- **Rule 132 (3)** requires a person with a valid first aid certificate on each jobsite. At least one employee at every jobsite must be trained and ready to provide first aid treatment in an emergency situation, and must be present at the worksite during construction activities.

- **Rule 132 (5)** requires first aid supplies be available on each jobsite, defines how they're stored and requires employees be made aware of their location.

- **Rule 132 (6)** requires that the contents of a first aid kit must be approved by a consulting physician.

- **Rule 132 (7)** requires employers to provide proper equipment to promptly and safely transport an injured person to a hospital or physician and a posted system for contacting 911.

MIOSHA has created a **First Aid and Emergency Requirements Fact Sheet** that can be viewed at: www.michigan.gov/mioshaconstruction.



Employers must have a plan in place to address emergency situations.

Excavation/Trenching Hazards

By: Paul Wrzesinski, CSHD Safety Section Supervisor

Excavation work is one of the most hazardous operations in the construction industry.

When excavated, the earth is always trying to return to a stable slope or grade. One cubic yard of soil weighs approximately 3000lbs., as much as an automobile. Installation and repair of underground utilities are especially hazardous and difficult to deal with.

This type of work has historically been an area of focus for the Construction Safety and Health Division (CSHD) and continues to be part of the MIOSHA Strategic Plan. Violations related to excavation work were number six of the top 25 serious violations for fiscal year 2006, and number 10 in 2007 for residential construction inspections.

The recognition of the type of soil is the most important aspect of deciding what to use to protect employees. MIOSHA Construction Safety Officers have been trained to



Bad Example: *This trench is not properly sloped or shored.*

identify soil type and to use a penetrometer to help determine the soil propensity for a cave-in. Sloping/shoring and trench boxes are the most common methods used to prevent a cave-in. If sloping is used, the angle of cut-back is determined by the type of soil identified.

To provide more detailed information, the CSHD has developed a **Trenching and Excavation Construction Fact Sheet** and a **MISS DIG System Construction Fact Sheet**. These Fact Sheets cover issues from the proper way to protect employees working in excavations, to the hidden hazards associated with existing underground utilities. They are available on the MIOSHA website for review at www.michigan.gov/mioshaconstruction.

Employers can contact the **Construction Safety and Health Division at 517.322.1856** for information on trenching and excavation requirements.

Employers are encouraged to contact the **Consultation Education and Training (CET) Division at 517.322.1809** for excavation/trenching information, training and onsite services.

Safe Operation of Cranes

Recent high-profile crane accidents in other states have resulted in many inquiries about MIOSHA regulations related to cranes. Cranes and other lifting equipment, large and small, are indispensable tools at Michigan construction worksites. If not maintained and used properly serious accidents can occur.

MIOSHA has investigated at least 14 crane accidents since 2003. These accidents resulted in one fatality, at least six serious injuries and untold hundreds of thousands of dollars in property damage.

MIOSHA Construction Safety Standard Part 10, Lifting and Digging Equipment, delineates employer and employee requirements for use of cranes including operator training, signals, crane inspections, wire rope inspection, rating capacities and work platforms.

Part 10 Rules related to cranes requires the employer to:

- Rule 1006a (1) – comply with the manufacturer's specifications and limitations.
- Rule 1012a – conduct frequent inspections.
- Rule 1008a – assure that a prospective operator, before assignment, has been trained.
- Rule 1009a – ensure that an employee has adequate knowledge of, and is capable of, operating the equipment.

More information regarding crane safety is available on the MIOSHA website.

LABORER – ELECTROCUTION FATALITY

In May of 2007 a 33-year-old worker was installing downspouts on a residential construction site. The employee was carrying a 28 ft. aluminum extension ladder and came in contact with a 4500 volt overhead power line. The employee was electrocuted.

MIOSHA violations:

- Part 1, General Rules, Rule 114 (1) – No Accident Prevention Program.
- Part 11, Fixed and Portable Ladders Rule 1124 (6) – Use of a metal portable ladder where there is potential contact with an electrical line.
- Part 11, Fixed and Portable Ladders, Rule 1124 (7) – Failure to maintain 20 feet from an electrical line with a metal portable ladder.
- Part 11, I & I Recording, Rule 2139 (1) – Not reporting a fatality.

CASE SUMMARIES

ROOFER – FALL FATALITY

In March of 2007 a 33-year-old employee was working near the edge of a flat roof installing a perimeter strip. When he pulled on an electrical cord to power a screw gun, he lost his balance and fell off the roof.

MIOSHA violations:

- Part 45, Fall Protection, 1926.502 (f) (2) – No warning line at the roof edge.
- Part 45, Fall Protection, 1926.502 (h) (1) – No provision of a competent person to monitor the safety of employees.
- Part 45, Fall Protection, 1926.503 (a) (1) – Lack of fall protection training.
- Part 1, General Rules, Rule 114 (2) – Accident Prevention Program deficiencies.

Combustible Dust Explosions

By: John Brennan, GISHD Director

Combustible dusts are fine particles that present an explosion hazard when suspended in air in certain conditions. A dust explosion can be catastrophic and cause employee deaths, injuries, and destruction of entire buildings.

MIOSHA Emphasis Program

It is important to determine if your company has this hazard. If you do, you must take action now to prevent tragic consequences. In many combustible dust accidents, employers and employees were unaware that a hazard even existed.

Combustible dusts are either organic or metal dusts that are finely ground into very small particles, fibers, fines, chips, flakes or a small mixture of these. Catastrophic explosions have been known to occur when these particles become airborne and come in contact with an ignition source.

MIOSHA has launched an emphasis program to **target industries that often face the potential for combustible dust hazards**. Establishments identified under the MIOSHA Emphasis Pro-



In 2003, this organic dust fire and explosion in a North Carolina pharmaceutical plant killed six employees and injured 38 people.

gram are subject to enforcement inspections.

Help is Available

Federal OSHA has developed a Safety and Health Information Bulletin, *Combustible Dust in Industry: Preventing and Mitigating the Effects of Fire and Explosions*, which is posted on its website at www.osha.gov. To locate the bulletin, type "combustible dust" in the search feature.

MIOSHA urges employers to review the information in the bulletin and take necessary steps to prevent such potentially dangerous hazards.

The MIOSHA Consultation Education and Training (CET) Division can help employers come in compliance with the combustible dust requirements, as well as other applicable MIO-OSHA standards.

To learn more about the free services available from the **CET Division**, please call 517.322.1809 or visit our website at www.michigan.gov/miosha.

**John Brennan, Director
General Industry Safety
& Health Division
517.322.1831**

No PPE Change in Michigan

By: John Brennan, GISHD Director

OSHA adopted a new standard for employer-paid personal protective equipment (PPE), with an effective date for compliance of May 15, 2008. Under the OSHA rule, all PPE, with a few exceptions, will be provided by employers at no cost to the employee.

Michigan OSHA is one of 26 "State Plan States" and operates its own safety and health program. Michigan already has standards in place requiring employers to pay for PPE, and has the same requirements as the OSHA changes. MIOSHA will not have to amend its PPE regulations.

The final rule does not create new requirements regarding what PPE employers must provide. It does not require payment for uniforms, items worn to keep clean, or other items that are not PPE.

Check out the MIOSHA Quiz for in-depth information on MIOSHA PPE requirements.



Workplace Heat Hazards

By: Lynn Totsky, GISHD Industrial Hygienist

Hot environments present serious hazards to employee safety and health. Heat stress, the combination of heat, humidity and physical labor, can lead to serious illness and even death.

Long exposure to extreme heat or too much activity under a hot sun causes excessive perspiration, which can lead to **heat exhaustion**. Symptoms include headache and a feeling of weakness, accompanied by nausea and vomiting.

By contrast, in **heat stroke**, there is an absence of perspiration; an extremely high body temperature; hot, dry skin; confusion; and loss of consciousness and/or convulsions. An in-depth case study on heat stress in the restaurant industry is available on our website at www.michigan.gov/mioshanews.

Static Hazards in Propane Handling

By Todd Strong, GISHD Senior Safety Officer

Care in the handling of propane cylinders is considered uncomplicated. However, incidents involving the ignition of propane by static electricity may be more common than many realize. This article is available on our website at www.michigan.gov/mioshanews and includes a case study and preventive measures.

CASE SUMMARIES

FIRE FIGHTER – RAN-OVER FATALITY

In February of 2007, a fire engine operator was driving a fire engine to an alarm with three fire fighters. The operator was driving with lights and siren on. As he approached an intersection, the fire engine was struck broadside by an SUV that ran through the traffic signal at a high rate of speed.

The operator and another fire fighter were ejected from the fire engine. The operator was run over by the fire engine and received fatal injuries.

MIOSHA Violation:

- Part 74, Fire Fighting, Rule 7421(2)(e) – Employer failed to enforce the use of seat belts in the fire engine.

OPERATOR – CRUSHED-BY FATALITY

In September of 2007, two machine operators were working together to correct a malfunction on a machine normally operated by one operator. The machine control button was activated while one employee was in a hazard area. The machine operator was crushed between the carriage and the frame of a pipe drawing machine. The employee was pronounced dead on the scene.

MIOSHA Violations:

- Part 85, Control of Hazardous Energy Sources, Rule 1910.147(c)(4)(i) – Inadequate alternate lockout procedures as the procedures implemented did not protect workers from reactivation and un-intended movement. Operator relied on emergency stop button for hazardous energy control.

- Part 1, General Provisions, Rule 33(3) – Inadequately labeled controls.

New Instruction: Workplace Violence

The Bureau of Justice Statistics estimates 1.7 million U.S. workers are injured each year during workplace assaults. According to the Bureau of Labor Statistics there were 564 workplace homicides in 2005 in the U.S., out of a total of 5,702 fatalities. This makes homicide the fourth-leading cause of fatal occupational injury.

In response to the prevalence of workplace violence, the General Industry Safety and Health Division has created an instruction to establish procedures for investigating complaints. The instruction explains that each complaint will be evaluated on a case-by-case basis.

When alleged issues are generally within the control of the employer and/or occur on the employer's premises, MIOSHA may investigate. If an inspection is conducted, the compliance officer will consider the elements of the work being performed.

The compliance officer will also do a review to determine whether there is a history of violence at the workplace. The analysis may include a review of existing incident reports, first aid reports, or recordable injuries, duties assigned to employees, administrative and work practices, and industry practices.

If the compliance officer finds the complaint to be valid, but no injury occurred, a safety recommendation will be issued to the employer. If employees have been injured and the employer has not taken adequate action, a general duty violation may be issued. The instruction is available on our website.

**Connie O'Neill, Director
Consultation Education &
Training (CET) Division
517.322.1809**

Young Workers in Construction

By: Sherry Scott, CET Supervisor

On March 21st, **Scott Austin**, a 19-year-old carpenter, was part of a crew working on a parapet wall on the roof of a five-story building in Detroit. He fell to his death 60 feet below – through an unguarded roof opening. (For details see page 3.)

MIOSHA is continuing a special initiative *“Extreme Safety for Working Teens”* to help ensure young workers have the information they need to stay safe on the job. This year our focus is on young workers in the construction industry.

Construction is one of the most hazardous industries in Michigan. Only about four percent of Michigan’s workforce is employed in construction – however, construction fatalities account for over 40 percent of all fatalities.

Our goal is to create a heightened awareness of the hazards associated



Scott Austin, a 19-year-old carpenter, fell to his death through this unguarded roof opening.

with construction work to help prevent young worker injuries and illnesses – like the tragic death of Scott Austin.

Most young people work at some time during high school and college. Although working can be a positive experience, there are also risks involved. Employers should take these steps to protect young workers:

- Assess the hazards of the work.
- Make sure the equipment used is safe and legal for young workers to use.
- Label equipment that young workers cannot use.
- Make sure there is appropriate supervision.
- Provide training to ensure that young workers recognize hazards and are competent in safe work practices.
- Ask young workers for feedback about the training.
- Involve supervisors and experienced workers in developing a comprehensive safety system that incorporates special guidance for young workers.

For more information please go to the MIOSHA website at www.michigan.gov/miosha, and click on *“Young Worker Initiative”* at the bottom of the page. Among the material are two fact sheets specific to the construction industry: *“Youth Worker Safety – The Construction Industry”* and *“Youth Fatal Facts in Construction.”*

CET DVD/Video Loan Library

The CET Division’s Safety and Health DVD/Video Library has more than 130 selections available on a free-loan basis.

The library is transitioning from VHS to DVDs and new DVD titles include: High Impact: Forklift Safety; Material Safety Data Sheets: Read It Before You Need It!; Confined Space: Case Histories; Defensive Driving; Prepared for the Worst; Bloodborne Pathogens: Take Precautions; and many more.

What are customers saying about the Library?

■ Excellent video! We used this to present to our staff and it was very well received. (#796 - High Impact: Forklift Safety)

■ Excellent, good feedback from employees. (#700 - Backs, A Bit About)

■ This is one of the most informative videos we have borrowed! Thanks! (#711 - Ladder Safety)

■ Very good video for our training. Thanks for your support. (#742 - Lockout-Tagout Procedures)

■ Excellent video! (#702 - Getting Out Alive)

■ Well done, very informative, ideas that can be implemented into our program. (#762 - Nursing Homes: Hazards and Solutions)

The revised *“Safety and Health Video Catalog”* is available on the MIOSHA website at www.michigan.gov/mioshavidoes.

MIOSHA Awards

MVPP & SHARP Awards

06/20/08–**Acument Global Technologies’ Holly Operations Gainey Drive facility**–MVPP Star Award. The facility has a proactive culture and team members realize safety is everyone’s responsibility. The facility employs 27 workers and produces metal washers for the automotive industry. Acument is a world leader in fastening systems.



06/18/08–**Quality Aluminum Products of Hastings**–SHARP Award. At Quality Aluminum, safety is as important as quality or production. They work hard to maintain an excellent safety record. Quality Aluminum is a family owned and operated manufacturer of high-quality aluminum building products and employs 50 workers.



06/11/08–**The MichCon Milford Compressor Station**–MVPP Star Award. MichCon has corporate goals to make sure all employees have a safe and healthy workplace. The station is a natural gas transportation and compression facility and employs 10 workers. Hourly employees are represented by Local 223, the Utility Workers Union of America.



05/30/08–**FIAMM Technologies Horn Division of Cadillac**–SHARP Award. The facility’s safety and health system provides outstanding worker protection. A plant safety team does quarterly safety audits and daily TPM (Total Preventative Maintenance) audits. FIAMM Group, based in Italy, is the largest horn manufacturer in the world.



05/14/08–**The Pfizer Kalamazoo facility**–MVPP Star Award. Pfizer has a company-wide policy that tailors safety issues to each site location. They produce high-quality medicines and employs 3,500 workers. It’s the largest Pfizer manufacturing facility in the world, as well as Pfizer’s global research headquarters for veterinary medicine.



The press releases for all MIOSHA Awards are available on our website: www.michigan.gov/miosha. On the home page, click on “Publications, Forms & Media,” and then click on “Press Releases.”

The CET Division recognizes the safety achievements of Michigan employers and employees through various awards, based on excellent safety and health performance. For more information, please visit our website.

MIOSHA News Quiz

Topic: Personal Protective Equipment (PPE)

Try your luck with the MIOSHA News Quiz!

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 on our website at www.michigan.gov/mioshanews.

John Peck, Director
 Management & Technical
 Services Division
 517.322.1851

WEB Update
www.michigan.gov/miosha
Ask MIOSHA

Fast answers to real-time questions is the goal of *Ask MIOSHA*. Prior to *Ask MIOSHA*, a formal letter to the agency was required for a response in writing.

Ask MIOSHA is quickly becoming one of the most popular services on the MIOSHA webpage. To date, there are more than 40 categories posted covering both general industry and construction topics. Below are two samples.

Question: What is the regulation for stacking products in the warehouse or on the production floor? We stack metal racks 4 feet tall, 5 racks high.

Answer: MIOSHA has no stacking height limit for general industry. General Industry Safety Standard **Part 1. General Provisions, Rule 15(1)** states, "Materials, including scrap and debris, shall be piled, stacked, or placed in a container in a manner that does not create a hazard to an employee. All places of employment, aisles, passageways, store-rooms, and service rooms shall be kept clean and orderly."

Rule 15(1) is performance based; it gives a required result but leaves the means to achieve that result up to the employer.

Criteria an employer can use to evaluate its rack stacking system include: The stacks are not leaning. No racks have fallen over. The racks are uniformly stacked. Uniformly means in a straight line, one on top of the other, with no racks sticking out precariously. No material has fallen to the floor.

The racks must not be so high that they interfere with a ceiling sprinkler system. General Industry Safety Standard Part 9. Fixed Fire Equipment, Rule 924 states the clearances between a ceiling type sprinkler deflector and the top of a stock pile shall be: 36 inches where the top of solid piled stock is more than 15 feet high or is more than 12 feet in rack or palletized storage; and 18 inches for all other piling.

Question: Are there any training programs tailored for residential home construction?

Answer: A Michigan Residential Fall Protection PowerPoint program is available to employers by contacting CET at 517.322.1809.

Visit *Ask MIOSHA* to review the questions and answers posted. If you do not find the information you need, submit your question today.

Variances

Variances from MIOSHA standards must be made available to the public in accordance with Part 12, Variances (R408.22201 to 408.22251). MIOSHA vari-ances are published in the MIOSHA News website: www.michigan.gov/mioshavariances

Jim Gordon, Director
Appeals Division
517.322.1297

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

Standards Update

Governor Jennifer M. Granholm appointed Kathleen S. Dobson of Kimball, Safety Director with Alberici Constructors, to the MIOSHA Construction Safety Standards Commission to represent members actively engaged in construction operations at the management level.

Status of Michigan Standards Promulgation

General Industry Safety Standards Commission

- **GI Part 74, Fire Fighting**, an advisory committee was appointed to update this standard.
- **GI Part 5, Scaffolding**, was revised to move aerial lift provisions to GI Part 58, effective June 18, 2008.

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 was appointed to consider crane operator certification.
- **CS Part 29, Communication Towers**, a public hearing was held July 15 in Lansing.

Occupational Health Standards Commission

- **Ergonomics Standard Advisory Committee** completed drafting a proposed standard and will present it at a joint meeting of the General Industry Safety and Occupational Health Standards Com-missions on August 25th in Lansing.
- **Latex Advisory Committee** is reviewing hazards related to occupational use of latex, particu-larly latex gloves for personal protection equipment.

Standards Consistency

- **GI Part 58, Vehicle Mounted Elevating and Rotating Work Platforms**, effective June 18, 2008, and **CS Part 32, Aerial Work Platforms**, effective March 20, 2008, were revised to establish more consistency between general industry and construction activities. Both general industry and construction aerial work platform operators will be required to follow the same requirements, resulting in less confusion and a safer workplaces.

Personal Protective Equipment – Violations Cited

MIOSHA has three **Personal Protective Equipment Standards** – one promulgated by each of the three MIOSHA standards commissions: General Industry Safety Standard **Part 33**, Construction Safety Standard **Part 6**, and Occupational Health Standard **Part 433**.

During the last fiscal year, the three PPE standards were cited a total of 1,195 times with 644 citations for Part 33, 331 citations for Part 6, and 220 citations for Part 433. The top ten PPE violations cited in FY2007 are below.

Citations	Percent	Part No.	Rule	Description
294	24.6%	GIS 33	408.13308	Hazard assessment and equipment selection
224	18.7%	GIS 33	408.13312	Face and eye protection
159	13.3%	CS 6	408.4622	Use of head protection
99	8.3%	OH 433	325.6005	Hazard assessment and equipment selection
92	7.7%	CS 6	408.4624	Use of face and eye protection
83	6.9%	OH 433	325.6006	Training
49	4.1%	CS 6	408.4625	Certification and use of foot protection
42	3.5%	GIS 33	408.13392	Hand protection
36	3.0%	GIS 33	408.1337	Head protection
32	2.7%	OH 433	325.6008	Face and eye protection

2008 MIOSHA Program-related Fatalities

The MIOSHA Program tracks fatalities in Michigan to provide vital information to help prevent fatal workplace accidents. In 2008, five Michigan workers have died from falls.

- A **28-year-old maintenance worker** died when he fell from a gas pipe he was repairing when it exploded.
- A **39-year-old supervisor** fell 15-20 feet while cleaning a belt conveyor.
- A **32-year-old mason** fell about 38 feet from a scaffold.
- A **19-year-old carpenter** fell about 60 feet when installing parapets on a roof.
- A **46-year-old maintenance supervisor** fell 30-40 feet when he stepped on a piece of roofing that would not support his weight.

Level II: MIOSHA Compliance Certification

The Proposed Level II MTI programming includes two separate tracks. The last edition of MIOSHA News included a summary of the proposed Level II Safety and Health Certification Program.

The second component of Level II certification is the opportunity to earn a Level II MIOSHA Compliance Certification. This certification will include a series of in-depth courses on specific MIOSHA safety and health standards for general industry. The training will be comparable to what is provided to new MIOSHA professional staff. In fact, in these courses, participants from the public will be trained alongside MIOSHA staff.

Level II Pilot Courses

To date, four standards courses have been developed (see below). The new courses were piloted in May and June 2008. MTI graduates, MIOSHA alliance and partnership partners, and others were invited to attend the special pilot courses to help critique and improve the courses while learning at the same time.

Participants in standards courses begin learning before attending the course by reviewing the specific MIOSHA rules on their own and taking an on-line pre-test. During the course, rule requirements are reviewed and specific applications, interpretations, and agency instructions are discussed. In addition, some courses will include the opportunity for hands-on exercises and simulated survey walk-throughs.

In-Depth MIOSHA Rule Training

The Level II MIOSHA Compliance Certification is designed for those who need an in-depth understanding of MIOSHA rule requirements including safety and health managers, maintenance and engineering staff, safety and health committee leaders, employee representatives, human resources personnel and others.

A second round of the four courses is scheduled for October 2008. If you interested in being added to the notification list for the second round of pilot courses, contact Macomb Community College at 586.498.4100.

Course #	MIOSHA Standards
Course 1	General Industry Safety Part 1. General Provisions General Industry Safety Part 7. Guards for Power Transmission
Course 2	General Industry Safety Part 40. Electrical Safety-Related Work Practices General Industry Safety Part 39. Design Safety Standards for Electrical Systems
Course 3	General Industry Safety Part 85. Control of Hazardous Energy Sources (Lockout/Tagout)
Course 4	Occupational Health Part 380. Occupational Noise Exposure and Hearing Conservation



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

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