



MIOSHA NEWS

Christman Partnership

Christman & MIOSHA Sign First Partnership Agreement in West Michigan with Zero Injury Safety Goal on \$200 Million Construction Project

On January 26th, The Christman Company joined with the Michigan Department of Labor & Economic Growth (DLEG), the Michigan Occupational Safety and Health Administration (MIOSHA) and more than 50 employers and supporting organizations to sign a historic partnership agreement that will promote the safety and health of workers on a major West Michigan construction project.

Michigan Street Development Project

Christman is both development partner and construction manager on the \$200 million Michigan Street Development Project, a unique public/private medical complex project located on the Michigan Street Hill in downtown Grand Rapids. The four-tower complex, a strategic economic growth project for the City of Grand Rapids and

West Michigan’s emerging life science corridor, is ultimately expected to help create about 2,000 healthcare jobs.

“Christman is one of Michigan’s premier contractors and has demonstrated an outstanding commitment to promoting safety on its projects,” said DLEG Director **Robert W. Swanson**. “This project, both during and after, will have a major impact on Michigan’s economy—while all partners combine their efforts to help prevent injuries. Christman has once again displayed its expertise and safety leadership by pursuing this ‘first ever’ partnership in West Michigan.”

The construction industry 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 nearly 50 percent of all fatal workplace accidents. All partners are committed to creating an environment where every construction worker goes home healthy and whole every day.

“Safety is a top priority at Christman and we want every worker to return to his or her home and family safely each day,” said **Don Staley**, corporate safety manager for Christman. “We are pleased and proud that virtually every organization involved in this project is not only philosophically embracing the ideal vision of a zero-injury workplace—but also agreeing to support the tactical action plans outlined in this agreement to help make it happen.”

Partnerships are an important emphasis in MIOSHA’s Strategic Plan to improve the health and safety of workers through cooperative relationships with groups, including trade associations, labor organizations, and employers. Partnerships move away from traditional enforcement methods and embrace collaborative agreements.

“The MIOSHA program is dedicated to working with employers to find innovative ways to enhance workplace safety and health,” said

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Safety is a top priority on the Michigan Street Development Project with all partners embracing a zero-injury workplace.

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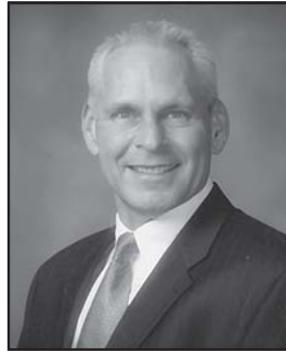
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Michigan Department of Labor & Economic Growth

From the MIOSHA Director's Desk

By: Douglas J. Kalinowski



Partnering Opportunities To Improve Safety & Health

I'm back! After having the opportunity to serve as Acting Deputy Director for seven months in the Department of Labor & Economic Growth (DLEG), it is great to return as MIOSHA Director.

This was an opportunity that I never expected to have and I learned a lot about many other programs and people within DLEG. What I learned will undoubtedly enhance my ability to work with all of Michigan's employers and employees and MIOSHA staff.

Thanks to MIOSHA Staff

Thanks to everyone in MIOSHA, especially Martha Yoder, who stepped up and eagerly took on additional responsibilities to carry out the MIOSHA mission – working to reduce injuries, illnesses and fatalities across Michigan.

Many things have been initiated in the past several months. Some of the key ones include: Connecting MIOSHA to Industry, the Michigan Challenge Program, completion of several partnerships and alliances, and initiatives for tree trimming, powered industrial trucks, fall protection, isocyanates and hexavalent chromium.

In addition to this, all of the 130-plus Lansing MIOSHA staff moved from temporary quarters back to our offices at the General Office Building at the State Secondary Complex – with absolutely no interruption in service!

New DLEG Director

DLEG has a new Director! **Keith W. Cooley** was appointed by Governor Granholm earlier this year and was confirmed unanimously by the Senate on March 20th. The Governor said, "Keith Cooley is an outstanding leader with an innovative spirit and is strongly committed to serving the people of Michigan."

Before assuming leadership of this department, he was the Chief Executive Officer of Focus: HOPE, a Detroit civil and human rights organization nationally known for its programs to overcome racism and poverty by giving people the skills to be successful in today's world. He also clearly demonstrated his commitment to workplace safety at Focus: HOPE. During his tenure, they received one Bronze, two Silver, and two Gold CET Awards!

"It's a great honor to serve as DLEG Director, following in the footsteps of Bob Swanson" said Cooley. "As the CEO of Focus: HOPE, nothing was more important to me than making sure men and women got jobs that provided living wages and superior prospects for the future."

Major Issues and Approaches

Where will we be going in the upcoming months? Following are some of the issues and approaches we will emphasize in 2007.

Connecting MIOSHA to Industry – This is a major focus for all of our staff. Every interaction that we have is an opportunity – an opportunity to positively and proactively work with employers and employees to better protect Michigan's working men and women.

Coordination of Enforcement and Consultation Interventions – We will continue to enhance our efforts to coordinate these interventions, avoid unnecessary overlap/duplication, and provide overall comprehensive safety and health services.

MIOSHA Training Institute – MIOSHA continues to work with Macomb Community College to develop a comprehensive, hands-on approach to training MIOSHA staff and other safety and health professionals across the state. We are including many other cosponsors in this effort to expand the reach of this program. The collaboration by everyone involved has been remarkable.

Take a Stand Day – Mark your calendars! August 15, 2007, will be the third MIOSHA "Take a Stand Day." On this day, all of our field staff and first line supervisors, both enforcement and consultation, will serve as "consultants" helping employers and employees better understand occupational safety and health. If this year is anything like 2006, we could very well have a greater demand for services on that day than we will be able to meet. Employers who cannot be included will be given priority for a consultation.

Promoting Strong and Effective Collaborative Partnerships and Alliances – The most effective way to make progress and address difficult issues is through working together. MIOSHA will continue to promote strong partnerships and alliances with employer groups, employee organizations and specific employers.

In all of our previous and current collaborations, the results in eliminating workplace hazards and minimizing injuries have been outstanding! One of our most recent partnerships with The Christman Company and several subcontractors and labor groups is highlighted in this issue. We expect the "bottom line," elimination of jobsite injuries and illnesses, to be as successful as all of our previous and current partnerships.

"Making a Difference"

As I said at the beginning of this column, **"It's great to be back!"**

For more than 25 years my passion has been and will continue to be occupational safety and health. Only by working together can we be truly successful in "Making a Difference" for Michigan's working men and women.

Douglas J. Kalinowski

Congratulations OETIKER USA!

OETIKER USA Receives SHARP Award for Safety and Health Excellence

On March 22nd, the OETIKER USA facility in Marlette became the ninth company in the state to receive the prestigious SHARP Award for an exemplary safety and health program.

MIOSHA established the Michigan Safety and Health Achievement Recognition Program (SHARP) Award to recognize employers that have achieved workplace safety and health excellence far beyond their peers.

"We applaud the outstanding safety and health achievements of OETIKER USA's employees and management," said DLEG Director **Keith W. Cooley**. "OETIKER companies worldwide stand for quality, innovation and continuous improvements. Your safety and health diligence sends a strong message to all employers that focusing on safety up front is a sound business decision."

Placing a Priority on Employees

MIOSHA Deputy Director **Martha Yoder** presented the SHARP Award to OETIKER USA General Manager **Kurt Matthes**, who accepted on behalf of all employees. All day shift employees attended the award ceremony. Safety committee members **Tim Dietzel**, **Tim Kennedy**, **Dan Stauffer**, **Terry Frank**, and **Hugh Ferguson**, also participated in the ceremony.

"It is a great honor to be a part of a team that consistently places a priority on the health and safety of our employees," said Matthes. "Because we have always believed that our employees are our single most important strength—it was an absolute 'no brainer' when we challenged ourselves to implement the practices and create the environment that demonstrated this belief."

The Michigan SHARP Program targets small, high-hazard employers—to help them develop, implement and continuously improve the effectiveness of their safety and health program.



Terry Frank, Bill Shane, Martha Yoder, Dan Stauffer, Kurt Matthes, Tim Dietzel, Connie O'Neill, Hugh Ferguson, and Tim Kennedy.

Achieving EHS & Quality Excellence

The MIOSHA Onsite Consultation Program in the Consultation Education and Training (CET) Division operates the Michigan SHARP Program. Onsite consultants work with employers to help them become self-sufficient in managing occupational safety and health. SHARP worksites earn an exemption from "programmed" MIOSHA inspections on a yearly basis.

OETIKER Group companies worldwide are committed to achieving excellence in quality standards, and in safety, health and environmental protections. OETIKER USA has received the following ISO registrations: ISO 9001:2002, ISO/TS16949, and ISO 14001 EMS. They also received the *Clean Corporate Citizen Award* in 2005 and 2006 from the Michigan Department of Environmental Quality (DEQ) for their environmental practices.

The North American Industry Classification System (NAICS) Code for OETIKER USA is 332722 – *Bolt, Nut, Screw, Rivet, and Washer Manufacturing*, which is classified as a high-hazard industry. OETIKER USA has 114 employees, and manufactures clamps and couplings for various industries.

In 2005, OETIKER had a Total Case Incident Rate (TCIR) and Days Away from Work and Restricted/Transfer cases (DART) rate that was below the 2004 Bureau of Labor Statistics (BLS) industry average. Their 2005 TCIR was 8.2 compared to the BLS rate of 8.6 for this type of industry. Their 2005 DART was 2.1, and compares favorably to the BLS industry rate of 3.9.

"The Michigan SHARP Program requires a comprehensive consultation visit, and the correction of all serious workplace safety and health hazards," said Yoder. "The OETIKER USA facility has developed a safety and health system that provides outstanding protection for their workers."



OETIKER USA's employees and guests attended the award ceremony and luncheon to celebrate their recognition as a SHARP facility.

Rewarding Safety Solutions

The company has an excellent safety and health management system in place, which incorporates each of the seven required SHARP program elements. The MIOSHA evaluation team consisted of **Paul Aiken**, Onsite Health Consultant, and **Bill Shane**, Onsite Senior Safety Consultant. Some of their best practices include:

- Quarterly plant safety audits conducted by the safety committee, with results posted on the employee self-service website;
- Training provided to all managers/supervisors on conducting Ergonomic Job Analysis within their departments;
- Re-engineering/design of material handling equipment to reduce chronic/biomechanical stress;
- 8D system used to address health and safety issues;
- Plant-wide incentive awards for meeting annual and quarterly safety objectives;
- Yearly goals for reductions in near misses;
- Safety training via computer testing modules; and
- Individual incentive awards for submitting and implementing continuous improvement ideas related to health and safety.

The OETIKER Group was founded in Switzerland in 1943. OETIKER Group companies provide sealing, fastening, and coupling solutions for the most demanding and difficult applications for automotive and industrial sectors worldwide. The OETIKER production facilities are supported by qualified research and development, engineering and manufacturing techniques, utilizing state-of-the-art testing, design and production methods. ■

Construction Season 2007

Gearing Up for Safety and Health!

*By: Bob Pawlowski Director
Construction Safety and Health Division*

With another busy construction season right around the corner, spring is a great time for construction employers to review and fine-tune their safety and health programs.

A good place to start is the Accident Prevention Program (APP) provisions of MIOSHA Construction Standard, Part 1, General Rules. It requires: a knowledgeable “Qualified Employee” be identified, regular worksite inspections, and specific employee training.

General rules for employers and employees include:

- Ensure that damaged or defective equipment is locked-out, made inoperable or removed.
- Ensure that trained and qualified employees operate equipment.
- Create, with all contractors at multi-employer sites, a plan for housekeeping and waste material disposal.
- Guard moving parts on machinery. Place larger machinery so it does not create a hazard.

Strategic Initiatives – Safety

Four MIOSHA strategic initiatives address issues associated with the greatest numbers of construction injuries:

1. **Falls,**
2. **Electrocutions,**
3. **Struck-By** (e.g., vehicles and equipment), and
4. **Crushed-By/Caught-Between** (e.g., trench cave-ins and entanglement with equipment).



This rough terrain fork truck must be provided with an adequate aerial work platform with appropriate fall protection. It is a violation of MIOSHA Part 12, to be elevated while standing on building materials.

In Calendar Year 2006, MIOSHA’s Construction Safety and Health Division (CSHD) investigated 26 MIOSHA program-related construction fatalities including nine falls, three cave-ins, three electrocutions, two explosions, five struck-by, one chemical exposure and three caught-by incidents. Between 2001 and 2006, the CSHD investigated 54 falls, 25 struck-bys, 24 electrocutions and 12 excavation cave-in fatalities.

Fall Protection

MIOSHA Construction Standard, Part 45, Fall Protection, addresses working from heights. It includes Conventional Fall Protection; guard-rail systems, safety net systems or fall arrest systems, and Alternative Fall Protection Measures and Fall Protection Plans.

To avoid fall hazards:

- Use at least one Conventional Fall Protection method when employees are exposed to a fall of six feet or more.
- For new construction, cover or guard floor holes as soon as they are created.
- For existing structures, survey the site before work and continually audit and address issues as work continues.
- Construct floor hole covers to support two times the weight of employees, equipment, and materials that may be used. Secure and color-code covers or mark with the words “HOLE” or “COVER.”
- Generally, fall prevention systems are preferred to fall protection systems.

Overhead Electrical Hazards

MIOSHA investigated 24 fatal electrocutions between 2001 and 2006. MIOSHA Construction Standards, Part 1; Part 8; Part 10; Part 11; Part 12; Part 17; and Part 32; each have rules that address specified electrical hazards.

To avoid hazards:

- Identify overhead or buried power line indicators. Post warning signs. Contact utilities for buried power line locations.
- Stay at least 10 feet away from overhead power lines. Distances increase as the power source exceeds 50,000 volts.
- Unless known, assume that overhead electrical



An employee died as a result of exposure to paint solvent while painting in this basement with inadequate ventilation. The hot water tank’s pilot light could also have ignited the flammable vapors.

lines are energized.

- De-energize and ground lines when working near them, or guard or insulate lines.
- Use non-conductive wood or fiberglass ladders.

Trenching and Excavation

MIOSHA Construction Standard, Part 9, Excavation, Trenching and Shoring, requires workers be protected by appropriate protective systems; proper angle or repose (cut-back), shoring systems or trench boxes when workers are in trenches greater than five feet deep.

To avoid excavation hazards:

- Evaluate soil conditions. Select and construct protective systems that meet Part 9 rules.
- Preplan; contact utilities to locate underground lines, plan traffic control, and evaluate structures that could affect protective systems.
- Test for low oxygen, hazardous gases and vapors.
- Provide safe access in-and-out of the excavation.
- Address water accumulations.
- Inspect sites at the start of each shift, following a rainstorm, or other hazard-increasing events.
- Keep excavations open the minimum amount of time necessary.

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Connecting MIOSHA to Industry

Linking Traditional Program Authority with Proactive Communication and Education

By: *Martha Yoder, Deputy Director MIOSHA Program*

In January 2007, the new “**Connecting MIOSHA to Industry**” initiative began with four major components:

1. Use of a single employer targeting list for compliance and consultation;
2. The development of improved coordination mechanisms between consultation and enforcement activities;
3. An increase in outreach activities to employers; and
4. The enhancement of communication skills among MIOSHA staff.

The goals are to support proactive safety and health systems, decrease workplace safety and health hazards, expand partnership opportunities and, therefore, increase the competitiveness of Michigan employers.

The last MIOSHA News issue provided information on a new instruction that provides guidance to MIOSHA staff on coordinating program activities. Our goal is to defer routine programmed MIOSHA inspections for employers who are working proactively with MIOSHA to address workplace safety and health issues through Consultation Education and Training (CET) Division hazard surveys or participating in a CET recognition program.

Over the past few months, MIOSHA consultation and enforcement field staff, supervisors, managers and agency administration, have participated in training programs designed to strengthen our interpersonal skills and our ability to communicate with employers and workers.

This training focused on three strategies:

- Increasing MIOSHA’s response to what is right. In other words, how does MIOSHA encourage safety and health efforts in workplaces covered by this program? MIOSHA’s intention is to do more to identify and recognize strengths in workplace safety and health systems. And, reward these efforts.

- Exploring what employers and workers need to be successful and to be more cognizant about the difficulties our customers face. MIOSHA’s intention is to make observations and increase the use of reflectively listening skills in order to gain insight as to what our clients need to be successful in reducing work-related injuries and illnesses and to be competitive in their field. The expectation is that every intervention will include dialog and information sharing.

- Discovering where employers may be out of compliance unknowingly due to lack of information or gaps in understanding MIOSHA requirements. MIOSHA will continue to encourage employers and workers to partner with MIOSHA proactively to review their workplace for possible improvements.

Overall, the goal is to link MIOSHA’s legislative mandates with opportunities to interact with employers and workers to create collective ownership for the safety and health of Michigan’s workforce. Traditional MIOSHA authority requires the program to mandate standards, protect workers, and gives MIOSHA authority to require that hazards be corrected.

The “Connecting MIOSHA to Industry” initiative emphasizes the need for MIOSHA to educate as part of every intervention. It calls for an increase in our sensitivity to the well being of every employing entity. MIOSHA seeks to expand our opportunities to build effective safety and health systems in Michigan workplaces. The chart below provides a summary of “Connecting MIOSHA to Industry” goals.

Our next steps for this important initiative include the continued exploration of the methods needed to notify employers selected for inclusion on MIOSHA priority list and how they can participate in the third annual “Take a Stand Day.” (See information on Page 19.)

“Connecting MIOSHA to Industry” is designed to help increase our program effectiveness by ensuring that interventions are educational, informative and useful—whether conducted by consultation or enforcement staff.



Keith W. Cooley

New DLEG Director

Keith W. Cooley was appointed by Governor Jennifer M. Granholm as DLEG Director effective March 5, 2007. Known as an innovative problem solver, Keith Cooley was previously employed at Focus: HOPE since July 2002 where he melded his passion for community service with his corporate expertise. He was appointed Chief Executive Officer in 2006, after serving four years as Chief Operating Officer of Focus: HOPE.

Under his leadership, Focus: HOPE became ISO (International Organization for Standardization) certified under 9001:2000, 14001 and TS 16949 standards for quality, environment and manufacturing, respectively; received MIOSHA CET Awards for accident reduction in 2005 and again in 2007; and developed robust strategic business planning and implementation processes.

Cooley began his professional career in 1968 as an experimental physicist with General Electric. He joined General Motors in 1972 as a project engineer and became program manager and an engineering director in its Cadillac Motor Car Division in 1985. Cooley was appointed Director, Strategic Planning, for the GM Corporate Communications Staff in 1994.

In 1997, Cooley founded Principia, Inc., a consulting company dedicated to helping organizations manage crisis and critical change. He later joined Motorola as Director, Telematics International Sales, GM account, in 2001.

Cooley received a Bachelor of Science degree in engineering physics and a Master of Science degree in nuclear engineering from the University of Michigan (U-M) in 1967 and 1972, respectively. As a U-M graduate student, he founded the Minority Engineering Programs Office, College of Engineering. In addition, he was a gymnast—the first African-American to compete in that sport at U-M—and was a member of a U-M Big Ten Championship team.

Strengthening MIOSHA’s Purpose

Program Authority	plus	Connecting Initiative	equal	Collective Ownership
Mandate Standards	plus	Educate Employers	equal	Shared Knowledge
Protect Workers	plus	Company Well-Being	equal	Supports People & Jobs
Authority To Correct	plus	Build Safety & Health Systems	equal	Respectful Cooperation

Connecting Strategies Build Collective Ownership Of the Safety & Health Of Michigan’s Workforce

Preventing Tree Trimming Fatalities

Employers in the Tree Trimming and Removal Industry Targeted for Compliance Inspections

*By: Adrian Z. Rocskay, Ph.D., CIH
Safety and Health Manager
General Industry Safety & Health Division*

Letters to 1,000 Employers

Due to a series of fatalities involving tree trimmers in Michigan, MIOSHA launched a tree trimming initiative last year to prevent more deaths. In October 2006, MIOSHA sent letters to 1,000 employers in the tree trimming and removal industry to raise awareness of the hazards.

A “Tree Care Industry” fact sheet and a PowerPoint presentation on tree trimming safety were sent with the letters. The fact sheet and PowerPoint presentation are for use by employers in their in-house training efforts. Copies of the applicable regulations—Part 53, Tree Trimming and Removal; Part 58, Vehicle Mounted Elevating and Rotating Work Platforms; and Part 33, Personal Protective Equipment—were also enclosed.

The letters directed those interested in receiving further consultation or training to call the MIOSHA Consultation, Education, and Training Division (CET) at 517-322-1809. These CET services are free. Several employers have since arranged for CET services and have obtained on-site hazard analysis, training, and program review. These services are still available.

Increased Enforcement

Employers in the tree trimming and removal industry have been randomly selected for compliance inspections. The inspections began in autumn 2006 and will be continuing through this spring and summer. In addition, compliance officers have been instructed to stop and initiate an investigation if they observe any unsafe tree trimming or removal operation while traveling.



When tree trimmers cut tree limbs away from power lines, they can come into contact with power lines that carry thousands of volts of electricity.

Tree Trimming Fatalities Nationwide

According to the U.S. Bureau Of Labor Statistics, the number of fatal injuries nationally among tree trimmers and pruners during 2003-2005 was 192. The leading causes of death were:

- Falling to a lower level (from the tree or vehicle-mounted elevated work platform),
- Being struck by a falling object (i.e., tree, tree limb), and
- Contact with electric current (power lines).

Falling to a Lower Level

Falling from a tree can cause trauma to the brain and other internal organs. Fatal falls typically occur from heights of 30 to 70 feet, although falls from even lower elevations can be deadly.

To prevent falls, an approved safety belt, tree trimming saddle belt, or a rope saddle must be used by an employee when aloft. Any climbing rope needs to be crocheted as soon as possible after the employee is aloft. When the employee is aloft in the bucket of an aerial device, a safety belt or harness with a lanyard shall be worn and attached, per Part 58. A safety belt or saddle made unsafe by damage, defect, or alteration must not be used.

To prevent deaths from all causes, the employer must train new employees regarding the hazards of tree trimming and removal, the safeguards to prevent injury and death, and the requirements of Part 53. A job briefing shall be conducted before any tree job involving unusual hazards. Particular attention should be paid to the potential for contact with energized power lines and to dead and decayed wood, which make a tree unstable.

Struck by a Falling Object

Tree limbs can weigh over 100 pounds and are dangerous if they strike a worker. To prevent “struck-by” fatalities, prohibit employees on the ground from standing or working directly under a tree trimming and felling operation. Cutting techniques need to be used that guide the limb and tree in a predictable direction, away from the worker. Head protection is required in work areas.

Electrocutions

Tree trimming is often done to clear tree limbs from overhead power lines. Distribution lines in urban and



A tree trimming worker was killed after he was pinned under this tree when it fell due to an incorrect cutting technique

rural areas carry between 1,000 and 30,000 volts of electricity. Worker contact with voltages in this range will cause cardiac arrest, severe burns, and probable death.

The most effective way to prevent electrocutions is to have the utility company de-energize and ground the line prior to any work. A less effective but still acceptable method is to maintain a safe work distance from the energized line. The voltage of the line determines the safe work distance: the higher the voltage, the greater the safe work distance. Part 53 lists the safe working distances.

If the work is being done from an aerial device, the minimum working distances are given by Part 58. For qualified line clearance tree trimmers, an alternative to the minimum working distances is the use of an electrically insulated aerial lift bucket, insulated gloves, and insulated sleeves.

The Bottom Line

Perhaps the best protection against fatalities is a comprehensive safety and health management system. Such systems can create a culture of safety and health that transcends mere compliance with individual regulations.

Safety and health management systems have the added benefit of helping with the company’s bottom line. The systems reduce medical expenditures, absenteeism, and workers compensation premiums. Indirect benefits include a higher quality work product, increased productivity, better labor-management relations, and reduced employee turnover.

In tough economic times, a safety and health management system can make the difference between being in the red and being in the black.

For more information on developing a safety and health management system, or for other free CET services, please contact the **CET Division at 517.322.1809.**

MIOSHA Training Institute Offers Certificate Programs

By: *Connie O'Neill, Director*
Consultation Education and Training Division

MTI Development

Since the MIOSHA Alliance was signed on September 26, 2005, with Macomb College M-TEC, development of a MIOSHA Training Institute has been ongoing. This year 15 MIOSHA Consultation Education & Training (CET) seminars are being offered under the banner of the MIOSHA Training Institute (MTI). The MTI courses contain objectives, course outlines, and other relevant course design information that will increase consistency in training, provide for hands on demonstrations of machinery and equipment, when feasible, and include an assessment component to evaluate participant's knowledge.

Expanding the MTI Program

The need to expand MTI course offerings throughout Michigan at other M-TECs and educational facilities became evident. Safety directors, safety coordinators, and safety committee members can attend a **series of courses** that will help them develop the knowledge and skills to improve their company's safety and health management systems.

There will be two certification tracks: General Industry Safety and Health, and Construction Safety and Health. Beginning October 1, 2007, the Level 1, General Safety and Health Certification Program will be launched. Participants attending six full days of training within a three-year timeframe will be recognized for their educational achievement with a Level One certificate. Attendance at all courses will be entered into the MTI database at Macomb College M-TEC.

Courses – Level One Certification – General Industry

- Fundamentals of Safety and Health – 3 day, required,
- When MIOSHA Visits and Top 25 Serious Violations – 1/2 day,
- MIOSHA Recordkeeping and Cost of Injuries – 1/2 day course
- Supervisor's Role in Safety and Health – 1 day,
- Lockout and Machine Guarding – 1 day,
- Ergonomics – 1/2 day course.

Courses – Level One Certification – Construction

- MIOSHA 10 hour Construction Course - 2-day required,
- Avoiding Electrocutations in Construction - 1/2 day required,
- When MIOSHA visits in Construction & Top 25 Serious Violations - 1/2 day,
- MIOSHA Recordkeeping and Cost of Injuries - 1/2 day,
- Supervisor's Role in Safety and Health – 1 day,
- Developing a Great Construction Safety Program - 1/2 day,
- Excavations; the Grave Danger - 1/2 day,
- MIOSHA Construction, Part 45. Fall Protection - 1 day,
- Health issues in Construction - 1/2 day,
- Asbestos Awareness - 1/2 day.

Course Information

Continuing education credits through Macomb M-TEC will be given for all courses as well as continuing education or maintenance points assigned for professional certifications. Discussions are also being held with Oakland University to explore future options for college credit.

Several MIOSHA Standard courses are also under development, which will provide in-depth training on a specific standard and will be attended by new MIOSHA personnel and offered to the public.

For a closer look at the current MTI course offerings, check out the MIOSHA web page at www.michigan.gov/mioshatraining, or the Macomb website at www.macomb.edu/mti. ■

New Steel Erection Rules

New MIOSHA Rules Add 13 Provisions to Make Riding the Headache Ball Safer

By: *Bob Pawlowski Director*
Construction Safety and Health Division

Riding the Headache Ball

For more than 20 years MIOSHA has had statutory language that addresses connectors performing steel erection riding the headache ball in certain situations. MIOSHA Part 26, Steel Erection, Rule 2609 (2) allowed riding the headache ball by no more than two connectors, when the work area is inaccessible or hazardous to reach by other means.

The intent of the rule is to establish riding the headache ball as the last resort; conventional access being the first choice, followed by use of a suspended personnel platform (SPP). The greater hazard that riding the headache ball and use of a SPP are both designed to protect against is, the hazard of physically climbing to an area where work must be performed and the fatigue associated with such activity.

Where a workstation is not accessible by SPP or conventional access, employees would be required to climb increasing exposure to a fall and fatigue hazards, if they cannot ride the headache ball.

MIOSHA Negotiated Rulemaking

Federal OSHA has criticized MIOSHA for this policy, because their steel erection rules ban riding of the headache ball in all situations. However, MIOSHA believes that there are in fact situations where riding the headache ball is the safer means for accessing the worksite. This view has been corroborated through testimony at two public hearings held on the issue in Michigan.

Whenever rules are considered that differ from federal OSHAs, the MIOSH Act mandates they be addressed through a negotiated rulemaking process. This involves one of three, nine-member, Governor-appointed standards commissions. These commissions, with members representing employers, employees, and the general public, may appoint an advisory committee with members representing those affected by the rules.

The Construction Safety Standards Commission appointed an advisory committee of affected parties to study and make recommendations to the commission with respect to the rules that allow riding the headache ball in certain situations.

New Personnel Hoisting Rule

The advisory committee recommended adding 13 provisions to make riding the headache ball safer and moving Rule 2609(2), with the 13 provisions, into a new rule, **Part 28, Personnel Hoisting in Steel Erection**. The commission approved these changes. The 13 provisions appear in Part 28, Rule 2809(2) as subsections (a) through (m). Part 26, Rule 2609(2), now makes reference to Part 28, Personnel Hoisting In Steel Erection.

The amended Part 26, and the new Part 28, were filed with the Secretary of State on March 14, 2007, and became effective on March 29, 2007. The new rules can be viewed on the MIOSHA website, www.michigan.gov/mioshastandards; click on "Construction." ■





Figure 1: Original Bushing Press and Control Arm Job. Forceful exertions and awkward postures were required to pound the control arm into position with a rubber mallet.



Figure 2: After component quality was improved, the worker positioned the control arm on the frame without pushing or pounding with the rubber mallet.

Ergonomic

Examples of Ergonomic Interventions

*Sheryl S. Ulin, Ph.D., CPE
Michael H. Lau, M.S.
The University of Michigan
Center for Ergonomics*

Reducing musculoskeletal disorders (MSDs) among Michigan workers is a strategic goal of the MIOSHA program. The incidence rate of musculoskeletal disorders involving days away from work among private industry Michigan workers in 2002 was 55.0 injuries and illnesses per 10,000 full-time workers, and was 55.3 for all workers in the United States (Bureau of Labor Statistics, 2004).

Ergonomic injuries and illnesses are a significant issue for Michigan employers and employees. For Michigan, private industry, in 2004, there were 35,730 musculoskeletal disorders requiring days away from work (BLS). Michigan Workers' Compensation data for FY 2003 indicates that about 60 percent of 48,789 injuries reported were for MSDs.

Commonly reported occupational or ergonomic risk factors of these problems include repetitive and static exertions, forceful exertions, awkward postures, localized stress concentrations, vibration, and temperature extremes (Armstrong, 1989). Ergonomic job analysis can be used to identify work-related risk factors and to guide analysts in designing work.

U of M Center for Ergonomics

The University of Michigan Center for Ergonomics is dedicated to furthering knowledge about human abilities as they relate to how humans interact with equipment in all settings, including work, transportation, defense, daily living, education and leisure.

Ergonomics is the process of designing the job to fit the worker—rather than forcing the worker's body to fit the job. Adapting tasks, workstations, tools, and equipment to fit the worker can help reduce stress on a worker's body and eliminate potentially disabling MSDs.

Published research by the Center provides a foundation for human biomechanical models, workrelated mechanisms of musculoskeletal disorders, methodologies for analyzing and designing jobs for control of musculoskeletal disorders, and principles for the design of human-centered technologies and man-machine interfaces.

Research and models developed at the Center are widely used by engineers, designers and safety and health professionals for analysis and design of human machine systems and to address

problems related to productivity, quality, safety, health, and esthetics. Two case studies of workplace changes that reduced worker exposure to work-related risk factors of musculoskeletal disorders are described here.

Manufacturing Case Study Bushing Press and Control Arm

A company that assembles automotive components uses automated conveyors and manual assembly of components into modules to supply automotive assembly facilities. On the bushing press and control arm job, a worker loads bushings and installs the control arm onto an engine cradle frame. Materials that the worker uses include bushings, a control arm (10.2 pounds), a cradle frame, nuts, bolts, an insulator cap and control arm bolts.

The worker operates a bushing station and utilizes part bins, stock racks and a conveyor. The worker uses a powered tool to install vertical body bolts and a rubber mallet. The worker needs to complete 60 parts per hour. A description of the worker's tasks is shown in Table 1.

The ergonomic assessment of the bushing press and control arm operation categorized this as a medium-high repetition job requiring forceful exertions to carry and position the control arm on the frame. When the control arm did not fit correctly on the frame, the worker pushed the part into position using the palm of the hand and by leaning forward and moving the legs apart to use body weight to create extra force. The worker also used a rubber mallet to help position the control arm. Figure 1 shows the worker positioning the control arm on the frame.

Awkward postures of the torso (forward bending), shoulders (elevated and extended arms), forearm (rotation), and hands (wrist forward, backwards and sideways bending) were observed. Specifically, the worker's arms were elevated and extended to get control arms from the top of the box. Localized contact stress was observed between the palm of the hand and the control arm when pushing it onto the frame and vibration exposure was observed when using the powered tool.

Two workplace changes were made to the Bushing Press and Control Press Operation.

1. An adjustable height lift table that rotated was installed for improved material display for the box of control arms. After the lift table was installed, awkward postures were reduced because workers could adjust the stock height and pick up the control arms closer to the body.

Table 1

Bushing Press & Control Arm Work Methods

1. Get 3 bushings.
2. Position 3 bushings in the bushing press. Determine if bushings are correctly seated by viewing indicator light.
3. Get and position 2 insulator caps on cradle frame.
4. Get control arm.
5. Position control arm on cradle frame.
6. Push control arm onto cradle frame.
7. Use rubber mallet to position control arm on cradle frame (as needed).
8. Get 2 control arm front bolts & nuts.
9. Hand start front bolts and nuts through frame and arm.
10. Get one control arm rear bolt and nut.
11. Get bushings.
12. Position bushings on turntable (to be installed by robot).
13. Get vertical body bolts.
14. Install body bolts with power tool.

Case Studies

In Manufacturing & Office Environments

2. The quality of the materials was improved. Company representatives worked with suppliers to reduce component build issues so that the control arm could be easily positioned on the frame without pushing or using the rubber mallet (see Figure 2). After material quality was improved, worker exposure to forceful exertions, awkward postures, localized contact stress and repetition was reduced.

Office Case Study Volunteer Coordinator

Food Gatherers is a non-profit organization that rescues and distributes food in order to reduce hunger in southeastern Michigan. One of the full-time positions within this organization is the volunteer coordinator, who coordinates volunteer activities and schedules. Materials that the volunteer coordinator used include files, documents and reference materials.

Most of the furniture used by the volunteer coordinator was donated to the organization. The work equipment used included a keyboard, mouse, monitor, computer, chair with adjustable seat pan height, desk and phone. The volunteer coordinator worked eight hours Monday through Friday and four hours on Saturday. Table 2 contains the work methods for this job.

The ergonomic assessment of the volunteer coordinator position categorized this position as a low repetition job requiring sustained exertions while using the computer and completing other tasks at the desk. Forceful exertions were required to transport food when assisting with food runs.

In addition, awkward postures of the torso (forward and lateral bending), neck (forward bending), forearm (rotation) and hands (wrist forward and backwards bending) were observed while the worker used the computer and completed other work tasks at the desk. Lastly, localized contact stress was observed when the worker rested her elbow, forearm and wrist on the desk edge while talking on the phone, using the mouse, keying and/or writing. Figure 3 shows the worker at her workstation.

Food Gatherers built a new warehouse and adjoining offices. The new office for the volunteer coordinator incorporated many workplace changes. The new work equipment included a chair with many adjustable features (seat pan height and tilt, back rest height, arm rest location, and lumbar support), a new computer system (flat screen monitor, keyboard with wrist rest, mouse and laptop computer), a monitor stand, and a separate computer work area and desk area

for paperwork and/or meetings with colleagues. These workplace changes reduced awkward postures and localized contact stress (see Figure 4).

Help is Available

The majority of ergonomic problems can be satisfactorily addressed by low-cost interventions utilizing in-house resources. Success is achieved when management and employees work together to identify ergonomic hazards and find practical solutions. An ergonomics program is part of an overall safety and health program.

The U of M Center for Ergonomics has a CET Grant from the MIOSHA program, and provides ergonomics training and service to a limited number of small- and medium-sized Michigan companies at no charge to these companies.

The objective of this grant is to provide employers and workers with information and procedures necessary to identify and control the conspicuous ergonomics workplace risk factors of MSDs. Grant personnel will develop customized on-site introductory ergonomics training seminars that will provide ergonomics information, workplace examples to illustrate ergonomic risk factors and job design principles. The seminars will be customized by utilizing risk factor examples from participating companies, as well as facilitated job analysis case studies.

In addition, limited follow-up activities will be conducted with the participating companies to document the integration of ergonomics within the company and workplace changes. These activities provide an excellent opportunity for Michigan companies to initiate or expand their ergonomics activities. To learn more about training provided by the Center, please contact **Sheryl Ulin** at **734.763.0133**.

The MIOSHA CET Division also provides training opportunities through seminars and in-house training programs to familiarize employers and employees with the basic principles of sound ergonomic design and practices. For information about training services, please contact the **CET Division** at **517.322.1809**

References

Bureau of Labor Statistics, U.S. Department of Labor, April 2004.

Armstrong, T. J. (1989). Ergonomics and cumulative trauma disorders of the hand and wrist. Hunter-Schneider-Mackin-Callahan (Eds.), Rehabilitation of the hand: Surgery and therapy. Third edition (pp. 1175 - 1191).

MI Department of Labor & Economic Growth, Workers' Compensation Agency, 2003. ■

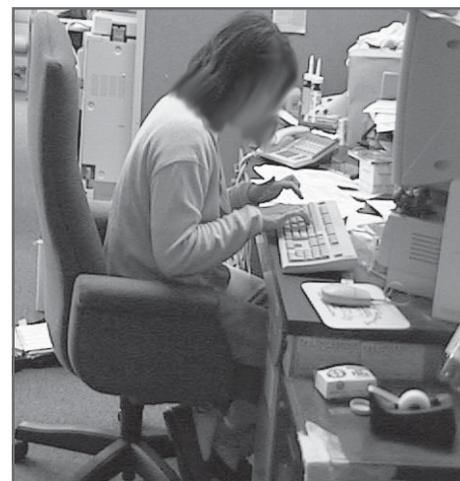


Figure 3: Original Volunteer Coordinator Job. Torso and neck forward bending were observed while using the keyboard.



Figure 4: After the new work equipment was positioned in the new office, posture stress and localized contact stress associated with computer and desk work were reduced.

Table 2
Volunteer Coordinator
Work Methods

1. Use computer:
 - a. Word processing,
 - b. Spreadsheets.
2. Supervise volunteers.
3. Assist with food runs.
4. Place phone calls to coordinate volunteers.
5. Speaking engagements for outreach activities.

The worker reported that the proportion of time spent completing work tasks:

- 50 percent of time is spent on tasks one and two.
- 25 percent of time is spent on task four.
- 25 percent of time is spent on tasks three and five.

MIOSHA Coverage of Volunteer Work

By: **Bob Pawlowski** Director
Construction Safety and Health Division

The Michigan Occupational Safety and Health Administration (MIOSHA) enforces workplace safety and health regulations under authority of the Michigan Occupational Safety and Health (MIOSH) Act, Act 154 of 1974, as amended.

The MIOSH Act states in Section 11(a) that it is the employer's responsibility to: "Furnish to each employee, employment and a place of employment which is free from recognized hazards that are causing, or are likely to cause, death or serious physical harm to the employee."

The MIOSH Act clearly places responsibility for a safe and healthy workplace on the employer.

Who is the "Employer" When Volunteers are Doing the Work?

During the investigation of any worksite or work operation, the MIOSHA inspector must establish an employer/employee relationship before MIOSHA rules and standards can be applied. While the investigation is ongoing we review contracts and written documents, and conduct interviews to determine what the working relationships are at the worksite.

A number of issues are considered to determine if an employer/employee relationship exists including, but not limited to; the important issues of who provides direction to individuals at the worksite with regard to work activity, and who provides wages to individuals at the worksite for work performed.

Before MIOSHA rules and standards apply, an employer/employee relationship must be established.

It is not unusual for volunteer organizations to conduct work that exposes individuals to hazards. A couple examples of such activities are the American Red Cross conducting a blood drive and Habitat for Humanity building a house.

MIOSHA has created an "analysis" procedure to determine whether there is an employer/employee relationship when individuals are performing work as volunteers. The main factor to consider is whether the work is "controlled" by a directing entity.

Who Controls the Work?

MIOSHA determines if an employer/employee relationship exists by asking the following questions.

1. Does the employer control the work?

MIOSHA must determine if the individual performing the work schedules at their convenience, or is the person told when to report and how to perform the work, is there a designated

position that provides direction/oversight, is the equipment and material needed for the work provided for the volunteer, etc.?

Based on the answers to these questions, MIOSHA will make a determination as to whether or whether not the work is controlled. If the work is not controlled, there is no employer/employee relationship and the volunteer work is not covered by MIOSHA jurisdiction. The analysis need go no further.

2. When it is determined the work is controlled?

MIOSHA will determine whether the volunteer receives any type of compensation, or whether a product is produced or revenue is generated as a result of the volunteer work. If the response is "no," there is no employer/employee relationship and the volunteer work is not covered by MIOSHA jurisdiction. The analysis need go no further.

3. When there is compensation, a product produced, or revenue generated.

MIOSHA will determine the level of compensation, product produced or revenue generated. If the level of compensation is De Minimis (i.e., a lunch or t-shirt, local fundraiser, etc.), there is no employer/employee relationship and the volunteer work is not covered by MIOSHA jurisdiction. The analysis need go no further.

4. When compensation, product produced, or revenue generated is more than De Minimis.

This indicates that for MIOSHA purposes, an employer/employee relationship does exist, and the volunteer work performed is covered by MIOSHA safety and health standards.

Can MIOSHA Help Protect Volunteer Workers?

Volunteers can be exposed to hazards that are just as serious as employees who are working for a paycheck. In the past three years, MIOSHA has identified two fatalities related to volunteer work.

In one case, a volunteer was killed when an improperly supported scaffold fell on top of him, and in the other a volunteer was electrocuted while making an electrical service tie-in. Proper lockout procedures and/or protective equipment were not used in this case. Implementing MIOSHA rule requirements could have prevented both of these tragedies.

The MIOSHA Consultation Education and Training (CET) Division is available at no cost to help organizations ensure that their volunteers work safely. The CET Division can be reached by calling **517.322.1809**.

For more information on workplace hazards, you can also visit the MIOSHA website at www.michigan.gov/miosha. ■

LANZO CONSTRUCTION COMPANY

Michigan Court of Appeals Upholds Guilty Verdict

On October 17, 2006, the Michigan Court of Appeals upheld the October 2004 trial court decision that found Lanzo Construction Company guilty of a MIOSHA felony in the 1999 workplace fatality of their employee, Robert James Whiteye (*People v. Lanzo Construction, No. 260738, 10/17/06*).

On May 24, 1999, a crew from Lanzo Construction Company was installing sewer pipe when a cave-in occurred on Lake Ravines Drive in Southfield. Robert James Whiteye, 52, a pipe layer, was pronounced dead at the scene after rescuers worked for several hours to extricate him from the trench.

The fatality occurred in an area of the excavation that was approximately 18 feet deep, with vertical walls, and without any protection to guard against cave-ins. MIOSHA investigated the cave-in and found that Lanzo Construction violated the most basic provisions of the MIOSHA trenching standard.

The company received 12 citations alleging willful violations connected to the fatality. Based on provisions in the MIOSH Act, Public Act 154, as amended, every willful violation, which is connected to a fatality, is referred to the Michigan Attorney General's Office for criminal investigation and/or prosecution.

The appeals court defined "willful" for MIOSHA purposes as requiring only that a defendant either intentionally disregard a MIOSHA requirement or be knowingly and purposely indifferent to a MIOSHA requirement. They rejected the defendant's claim that "willful" equates to gross negligence under involuntary manslaughter.

The appeals court ruled, "Accordingly, the trial court not only employed the proper definition of willfulness as it relates to MIOSHA violations, there was sufficient evidence to support its conclusions of law on this issue."

The court also clarified how a corporation could become criminally responsible through the acts of an onsite foreman and superintendent. The court determined that they were "high management official(s)," i.e. those "having supervisory responsibility over the subject matter of the offense and acting within the scope of his employment in behalf of the corporation." Using this definition, the court determined that Lanzo Construction bore criminal liability for the worker fatality.

The unanimous decision was signed by appellate judges Deborah Servitto, Christopher Murray and Michael Smolenski. ■

Comcast Michigan Region Alliance

Comcast Becomes First Michigan Business to Form Alliance with MIOSHA

On January 25th, Comcast Michigan Region, the Michigan Department of Labor & Economic Growth (DLEG) and MIOSHA signed a strategic alliance to protect the safety and health of workers in Michigan's telecommunications industry.

"We are proud today to sign this formal alliance with the Comcast Michigan Region," said DLEG Acting Director **Doug Kalinowski**. "Comcast is the nation's largest cable provider and a communications industry leader. They are also a leader in providing a safe and healthy work environment for their employees."

Comcast is the first business in Michigan to sign a formal alliance with the MIOSHA Program to protect their workers. Alliances enable organizations committed to workplace safety and health to collaborate with MIOSHA to prevent workplace injuries and illnesses

"At Comcast, we take very seriously our responsibility to provide a safe working environment for our more than 4,000 Michigan employees," said **David Buhl**, Comcast Senior Vice President, Michigan Region. "Our alliance with MIOSHA will allow us to continue educating our workforce and cultivate the safest possible work environment."

Signing the alliance were: **Ken Flechler**, Vice President of Safety Facilities and Compliance,

Comcast Corporate Office; **David Buhl**, Comcast Senior Vice President for the Michigan Region; **Marc Broadnax**, Director of Safety and Compliance, Comcast Midwest Division; **Doug Kalinowski**, DLEG Acting Deputy Director; **Martha B. Yoder**, MIOSHA Acting Director; and **Connie O'Neill**, Director, MIOSHA Consultation Education and Training (CET) Division.

Comcast is dedicated to promoting a safe workplace for its workers. The purpose of the alliance is to develop safety and training programs for the telecommunications industry and to strengthen safety awareness for their employees and the communities they serve.

The key goals include:

- Support the continuing efforts of Comcast to provide a safe work environment.

- Establish industry best practices and industry-related safety programs.

- Create and develop training programs specifically for the telecommunications industry in Michigan.

- Develop public service announcements promoting safety to subscribers within the Comcast footprint.

Comcast has established a strong safety and health management system that provides the core for their employee protection activities. This is demonstrated in part by Comcast's dedication to implementing comprehensive safety programs covering vehicle accident, facility management and employee injury prevention.

Comcast Corporation (www.comcast.com) is the nation's leading provider of cable, entertainment and communications products and services. Comcast is principally involved in the development, management and operation of broadband cable systems and in the delivery of programming content. ■



MATERIAL SAFETY DATA SHEETS (MSDS)

HOW ACCESSIBLE DO THEY HAVE TO BE?

By: **Felix Acevedo**, Supervisor
Consultation Education and Training Division

The purpose of the Hazard Communication standard is: "To ensure that the hazards of all chemicals produced or used in the workplace are evaluated and that the information is transmitted to employers and employees."

One of the best avenues to inform employees about the hazards of the chemicals is through training and education on specific Material Safety Data Sheets. MSDSs contain information about the hazardous ingredients, proper storage, required personal protective equipment, effects on the body, as well as other information for safe handling and use.

How accessible must an MSDS be?

MSDSs must be readily accessible to employees during each work shift and in their work area(s). In addition, the MIOSH Act requires MSDSs be organized in a consistent and systematic manner. Employees must be trained in how

to locate the sheets.

MIOSHA interprets the term "readily accessible" to mean immediate access to MSDSs. Workers shouldn't have to ask for MSDSs; employees could perceive this as a barrier to access.

Employers have the flexibility to determine how accessibility will be accomplished. If electronic systems are used, the system must be readily accessible and employees trained in its use. Computers with printers, microfiche machines, the Internet, CD-ROMs, fax machines, etc., are acceptable.

If an employee requests a copy of a MSDS, the standard does not address any specific time frame to provide a copy, however responses to employees should be reasonable.

What violations would be cited related to MSDS Accessibility?

If an employer possesses an MSDS, but it is not readily accessible to employees while in their work area, then a violation of

1910.1200(g)(8) shall be cited.

Violations of 1910.1200(g)(8) shall also be cited when an employer using electronic access as an integral part of the hazard communication program does not have an adequate back-up system to address emergency situations. Immediate access is especially important when the information is necessary in an emergency.

MIOSHA Agency Instruction, STD 04-1, *Hazard Communication*, provides guidance on interpreting and applying the standard. The Instruction is located on the MIOSHA website, www.michigan.gov/miosha. Click on "Standards and Legislation." Then select "General Industry" and scroll to Part 92. Hazard Communication. In the far right column select "Instructions."

MIOSHA's interpretation on access to MSDSs is consistent with federal OSHA. (See www.osha.gov, click on "Interpretation," in text search type "Hazard Communication," then on page 8 click on "# 71 dated 07/15/96.") ■

CET Awards

MIOSHA recognizes the safety and health achievements of Michigan employers and employees through CET Awards, which are based on excellent safety and health performance.

Cascade Engineering – Grand Rapids

On December 15, 2006, Cascade Engineering(s Industrial Solutions-Container Group) received the **MVPP Rising Star Award** for exemplary workplace safety and health.

“Cascade Engineering thrives on finding solutions to tough challenges. Because of that commitment, they are leading the industry in the next generation of plastics engineering,” said DLEG Director **Robert W. Swanson**. “We are honored to present this award to Cascade’s Container Group for using that same commitment to provide a safe and healthy environment for their workers.”

Director Swanson and MIOSHA Acting Director **Martha Yoder** presented the award to **Jeff Miles**, Plant Manager; **Sharon Darby**, Human Resources Manager; **Noah McGhee**, Shift Supervisor; and **Bob Card**, Maintenance Department. **Fred P. Keller**, Chairman and CEO, Cascade Engineering, participated in the award ceremony.

“This award recognizes the strides we have made in shifting our corporate culture from one of reactive compliance to proactive change as we continue to operate within a framework of sustainable business practices,” said Keller. “When a corporation dedicates itself to achieving this high standard of safety—it drives innovation across the company.”

“The team at Cascade Engineering is dedicated to working safely each and every day, and it is a great honor to be recognized by MIOSHA for our efforts,” said Miles. “I would like to thank our staff for the commitment; time and energy they have shown in helping us achieve this award.”

Among the Container Group’s best practices are their training of technical employees in performing mold change operations and their excellent housekeeping practices. The facility has three “Rising Star” goals, which will qualify them for the MVPP Star Award.

On June 17, 2005, the facility received the **Ergonomic Success Award** from MIOSHA’s CET Division. The award recognizes employers for instituting ergonomic improvements and substantially reducing musculoskeletal disorders.

Based in Grand Rapids, Cascade Engineering is shaping ideas in plastics through the development, engineering and manufacturing of plastics products. The Container facility employs nearly 90 workers and produces a variety of plastic carts and containers for a broad spectrum of customers.



Front: Kristine Nietering, Martha Yoder, and Sharon Darby. Back: Bob Card, Fred Keller, Jeff Miles, Robert Swanson, and Noah McGhee.

Focus: HOPE – Detroit

On February 7th, two Focus: HOPE programs received awards from MIOSHA for outstanding safety and health records.

The Machinist Training Institute and the Center for Children have both gone **more than five years without a lost time accident!**

“We are honored to recognize Focus: HOPE for their outstanding commitment to workplace safety and health,” said DLEG Director **Robert W. Swanson**. “Focus: HOPE has a long and proud history of providing all Michigan citizens with sustainable job training skills. They are providing cutting edge training that will help us remain competitive in the global economy.”

MIOSHA Consultation Education and Training (CET) Division Director **Connie O’Neill** presented the **Gold Award** to **Judith Goston**, Director of Education, Focus: HOPE Center for Children; and the **Gold Award** to **Brian Meriweather**, Manager, Machinist Training Institute; during a manager’s meeting.

“Safety is a high priority here,” said Focus: HOPE CEO **Keith W. Cooley**. “We truly are proud that our machine shop and children’s center have gone five years without a lost workday. It attests to the effectiveness of managers and colleagues working together to provide the safest environment possible.”

“Here at Focus: HOPE, safety does not just happen by chance. Our managers and staff make it happen,” said **Roger Paige**, manager of safety. “Our Center for Children staff has virtually eliminated potential hazards and our Machinist Training Institute has the safest manufacturing floor around because our managers stay on top of safety concerns.”

On Nov. 15, 2006, U.S. Secretary of Labor **Elaine Chao** presented Focus: HOPE with an *Exemplary Public Interest Contribution (EPIC) Award* in Washington, D.C., in recognition of its success in opening employment opportunities for minorities and women over the last 25 years.

Focus: HOPE has transformed the lives of hundreds of thousands of people in the Detroit area since its founding in 1968. It established education and training programs to help minorities gain access to jobs and financial independence. It has been recognized nationally and locally for its efforts to bridge the racial divide. Details on their programs and services are available on the Focus: HOPE website www.focushope.edu.



Tim Duperron, Focus: HOPE Chief Operating Officer; Connie O’Neill, CET Division Director; and Roger Paige, Focus: HOPE Manager of Safety.

Education & Training Calendar

Date	Course Location	MIOSHA Trainer Contact	Phone
May			
10	Machine Guarding, JSA and Lockout/Tagout Auburn Hills	Richard Zdeb Donna Preston	248.391.6081
10	Powered Industrial Truck Train-The-Trainer Howell	Karen Odell Janie Willsmore	517.546.3920
10	Guarding For Manufacturing University Center	Bob Carrier Mike Rickey	989.758.3635
22 & 23	Two-day Mechanical Power Press Seminar Port Huron	Jeff Kelley Carter Hitesman	810.982.8016
24	Machine Guarding, JSA and Lockout/Tagout Traverse City	Anthony Neroni Shelly Hyatt	231.546.7264
June			
5	MIOSHA Recordkeeping and Work-Comp Strategies Holland	Deb Gorkisch Brian Cole	616.331.7180
5 & 6	Accident Investigation: Start to Finish Warren	Lee Jay Kueppers Holger Ekanger	586.498.4100
7	Confined Space Entry Alpena	Doug Kimmel Shelly Hyatt	231.546.7264
7	Confined Space Entry Clinton Township	Lee Jay Kueppers Anthony Kowalski	586.498.4055
12, 13 & 14	MIOSHA's Fundamentals of Safety and Health Traverse City	Anthony Neroni Shelly Hyatt	231.546.7264
13	Machine Guarding, JSA and Lockout/Tagout Port Huron	Jeff Kelley Carter Hitesman	810.982.8016
14	Process Safety Management University Center	Bob Carrier Mike Rickey	989.758.3635
20	Self-Inspection to Identify Hazards and Training Needs Lansing	Debra Gundry Suzy Carter	517.394.4614
21	Self-Inspection to Identify Hazards and Training Needs Auburn Hills	Richard Zdeb Donna Preston	248.391.6081
27	Dealing With Workplace Violence Flint	Linda Long Debbie Malbin	810.230.9300
July			
17	Lockout and Machine Guarding Southfield	Karen Odell Jack Mihalko	248.858.8830
18	Self-Inspection to Identify Hazards and Training Needs Flint	Linda Long Debbie Malbin	810.230.9300
August			
15	When MIOSHA Visits Port Huron	Jeff Kelley Carter Hitesman	810.982.8016
22	MIOSHA Recordkeeping and Work-Comp Strategies Auburn Hills	Richard Zdeb Donna Preston	248.391.6081
22	MVPP and MSHARP Application Workshop Plymouth	Doug Kimmel Gloria Coffman	734.354.3302
22 & 23	Continuous Safety Improvement Flint	Linda Long Marlene Nicol	810.600.1440

Co-sponsors of CET seminars may charge a nominal fee to cover the costs of equipment rental, room rental, and lunch/refreshment charges. For the latest seminar information check our website, which is updated the first of every month: www.michigan.gov/miosha.

Construction Safety Standards Commission

Labor

- Mr. D. Lynn Coleman
- Mr. Patrick "Shorty" Gleason*
- Mr. Gregg A. Newsom
- Mr. Larry Redfearn

Management

- Mr. Donald V. Staley
- Mr. Peter Strazdas
- Ms. Valerie J. Warren**

Vacant

General Public

Vacant

General Industry Safety Standards Commission

Labor

- Mr. Dwayne F. Betcher*
- Mr. William L. Borch
- Mr. Karl E. Heim
- Mr. Jeffrey Radjewski

Management

- Mr. Dennis M. Emery**
- Mr. Thomas J. Pytlik
- Mr. George A. Reamer

Vacant

General Public

Vacant

Occupational Health Standards Commission

Labor

- Mr. James B. Cianciolo
- Mr. Andrew J. Comai
- Ms. Margaret Robinson Faville*
- Chief Ricardo L. Longoria

Management

- Mr. David L. Glynn**
- Mr. John E. Miller
- Mr. Ronald J. Torbert

Vacant

General Public

- Mr. Satyam R. Talati

*Chair **Vice Chair

Standards Update

MIOSHA Consolidates Two Spray Finishing Standards

MIOSHA currently has two standards covering spray finishing: General Industry Safety Standard Part 76, Spray Finishing and Dip Tanks, and Occupational Health Standard Part 528, Spray Finishing Operations.

MIOSHA is in the process of consolidating these two standards and adopting the comparable federal OSHA 1910.107 and 94(c) standards by reference. The consolidated standard will be entitled, "**Spray Finishing Using Flammable and Combustible Materials.**"

Combining the two standards will eliminate the overlap of standards and create a simpler standard for national employers and consultants. It will also make the MIOSHA standard as effective as the federal standards.

The dip tanks portion of Part 76 will be combined with the Occupational Health Standard Part 526, Open Surface Tanks, and will be entitled, "**Dipping and Coating Operations.**" The new Dipping and Coating Operations standard will adopt federal OSHA 1910.122 to 1910.126 standards by reference.

The new Dipping and Coating Opera-



tions standard will eliminate a confined space loophole found in the old Open Surface Tank standard by referencing the Confined Space standard.

It will also update references for NFPA standards and ACGIH Industrial Ventilation Manual from 1960's or 1970's edition to more current and accurate 1995 editions. MIOSHA anticipated this consolidation of three standards to two will be final by late summer and will be broadly announced.

New Rules for Personnel Hoisting in Steel Erection



Construction Safety Standard, Part 26, Steel Erection, was amended, and became effective on March 29, 2007. Construction Safety Standard, **Part 28, Personnel Hoisting in Steel Erection**, is new and also became effective on March 29, 2007.

Significant revisions include clarifying that riding the headache ball is prohibited except when connectors follow the new construction standard Part 28, and rescinded duplicative Rules 2624 and 2625.

This rule clarifies when and how a connector may be lifted to the workstation via a headache ball. (For more information, see article on Page 7.)

To contact any of the Commissioners or the Standards Section, please call 517.322.1845.

Status of Michigan Standards Promulgation

(As of April 27 2007)

Occupational Safety Standards

General Industry

Part 05.	Scaffolding (Joint w/GI-58 & CS-32)	Draft approved by Commission
Part 08.	Portable Fire Extinguishers	Amended, effective 5/15/06
Part 17.	Refuse Packer Units	Approved by Commission for review
Part 19.	Crawler, Locomotive, & Truck Cranes	Approved by Commission for review
Part 20.	Underhung Cranes & Monorail Systems	Approved by Commission for review
Part 39.	Design Safety Standards for Electrical Equipment	Draft rule approved by SOAHR
Part 58.	Vehicle Mounted Elev. & Rot. Platforms (Joint w/GI-5 & CS 32)	RFR approved by SOAHR
Part 62.	Plastic Molding	Approved by Commission for review
Part 76.	Spray Finishing	Draft rule approved by SOAHR
Part 79.	Diving Operations	Approved by Commission for review
Pending	Ergonomics (Joint)	At Advisory Committee

Construction

Part 01.	General Rules	Approved by Commission for review
Part 02.	Masonry Wall Bracing	Approved by Commission for review
Part 12.	Scaffolds & Scaffold Platforms	Approved by Commission for review
Part 22.	Signals, Signs, Tags & Barricades	Final, effective 11/20/06
Part 26.	Steel Erection	Final, effective 3/29/07
Part 28.	Personnel Hoisting in Steel Erection	Final, effective 3/29/07
Part 29.	Communication Towers	At Advisory Committee
Part 31.	Diving Operations	Approved by Commission for review
Part 32.	Aerial Work Platforms (Joint w/GI 58)	RFR approved by SOAHR

Occupational Health Standards

General Industry

Part 301.	Air Contaminants for General Industry	RFR approved by SOAHR
Part 315.	Chromium (VI) for General Industry	Final, effective 8/7/06
Part 316.	Diisocyanates	RFR approved by SOAHR
Part 451.	Respiratory Protection	Final, effective 2/8/07
Part 504.	Diving Operations	Approved by Commission for review
Part 526.	Open Surface Tanks	RFR approved by SOAHR
Part 528.	Spray Finishing Operations	RFR approved by SOAHR
Part 529.	Welding, Cutting & Brazing	Approved by Commission for review
Pending	Ergonomics (Joint)	At Advisory Committee
Pending	Latex	At Advisory Committee

Construction

Part 601.	Air Contaminants for Construction	RFR approved by SOAHR
Part 604.	Chromium (VI) for Construction	Final, effective 8/7/06

The MIOSHA Standards Section assists in the promulgation of Michigan occupational safety and health standards. To receive a copy of the MIOSHA Standards Index (updated March 2006) or for single copies and sets of safety and health standards, please contact the Standards Section at 517.322.1845, or at www.michigan.gov/mioshastandards.

RFR Request for Rulemaking
 SOAHR State Office of Admn. Hearings and Rules
 LSB Legislative Services Bureau
 JCAR Joint Committee on Administrative Rules

WEB Update **V a r i a n c e s**

By: *Staci M. Smith, Web Developer*
Consultation Education and Training Division

Published October 23, 2006

CET Division Updates

A new sub-category of the CET Division's website is now live. Employers can go online and learn more about CET Division services and **electronically submit a request for assistance**. Go to www.michigan.gov/cet and click on "Request for Consultative Assistance."

Once submitted, the request will be reviewed and assigned to a CET safety or health professional, who will contact the employer about the requested services.

All CET Division consultant's **electronic business cards** are now viewable online. Links to each individual e-card have been inserted into the CET Consultant Directory (CET #0106w). The e-card contains a photo and biography of each CET professional.

There are three ways to find this document from the MIOSHA homepage:

1. Click on "Consultation Education & Training" from the left navigation bar. Scroll down to "Consultative Services" and click on "CET Consultant Directory."

2. There is a link in the "Contact CET" box just to the right of the "Consultative Services" box, inside the "Education & Training" box.

3. Or click on "Publications, Forms, & Media" from the left navigation bar. Then click on "Brochures." It is available to print or order via the U.S. Mail.

Construction Update

There are a total of **18 Construction Fact Sheets** on the MIOSHA website. Recent updates have been made to the following fact sheets: Electrical Incidents, Falls, and Trenching and Excavation. The newest fact sheets are Fork Trucks, Isocyanate Exposure, and Hexavalent Chromium.

These fact sheets can be found by going to www.michigan.gov/miosha, clicking on "Compliance," and scrolling down to MIOSHA Construction Fact Sheets.

Directions to MIOSHA

Directions to MIOSHA can be found on the homepage, www.michigan.gov/miosha, in the "Related Links" section.

MIOSHA's physical address is:
 7150 Harris Drive
 Dimondale, MI 48821

For Information

If you need further assistance or have any questions regarding these updates, please contact the **MIOSHA CET Division at 517.322.1809**. ■

Following are requests for variances and variances granted from occupational safety standards in accordance with rules of the Department of Labor & Economic Growth, Part 12, Variances (R408.22201 to 408.22251).

Variances Requested Construction

Part number and rule number from which variance is requested

Part 32 - Aerial Work Platforms: R408.43209, Rule 3209, Rule 3209 (8) (b), Rule 3209 (8) (c), and Rule 3209 (9)

Summary of employer's request for variance

To allow employer to firmly secure scaffold planks to the top of the intermediate rail of the guardrail system for use as a work platform provided certain stipulations are adhered to.

Name and address of employer

Ann Arbor Ceiling & Partition Co., LLC

Location for which variance is requested

MGM Grand Casino, Detroit

Name and address of employer

Wm. Crook Fire Protection Co.

Location for which variance is requested

Ford Van Dyke Transmission Plant, Sterling Heights

Name and address of employer

Denn-Co Construction Inc.

Location for which variance is requested

MGM Casino, Detroit

Name and address of employer

Limbach Company, LLC

Location for which variance is requested

St. John Hospital, Detroit

Name and address of employer

Ventcon

Location for which variance is requested

General Motors Powertrain Lab Consolidation, Pontiac

Variances Granted Construction

Part number and rule number from which variance is requested

Part 32 Aerial Work Platforms: R408.43209, Rule 3209, 3209 (8) (b), and 3209 (9)

Summary of employer's request for variance

To allow the employer to firmly secure scaffold planks to the top of the intermediate rail of the guardrail system for use as a work platform in accordance with certain stipulations.

Name and address of employer

American Erectors, Inc.

Location for which variance is requested

United States Postal Service, Pontiac

Name and address of employer

Bristol Steel & Conveyor Corp.

Location for which variance is requested

General Motors Corporation, Engineering Consolidation, Pontiac

Motor City Casino, Detroit

Name and address of employer

Great Lakes Steel Construction, Inc.

Location for which variance is requested

United States Postal Service, Pontiac

Name and address of employer

John E. Green Company

Location for which variance is requested

General Motors Power Train Facility, Pontiac

Name and address of employer

Midwest Steel, Inc.

Location for which variance is requested

Detroit Metro Airport, Detroit

Part number and rule number from which variance is requested

Part 10 Lifting & Digging Equipment: Rule 1015a (2) (d)(f)(g)(h)(i), 1015a (3), 1015a (4); 1018a (1)(2)(21); 1019a (1); and 1021a (4)

Summary of employer's request for variance

To allow the use of a suspended work platform to hoist or suspend personnel or to provide access to elevated work areas in a manner that exposes employees to the least hazard practicable. All requirements of Construction Safety Standard, Part 10. Lifting and Digging Equipment except Rule 1015a (2) (d)(f)(g)(h)(i), 1015a (3), 1015a (4); 1018a (1)(2)(21); 1019a (1); and 1021a (4)

Name and address of employer

Hamon Custodis, Inc.

Location for which variance is requested

Monroe Power Plant, Monroe

Variances Granted General Industry

Part number and rule number from which variance is requested

Part 432 - Hazardous Waste Operations and Emergency Response

Summary of employer's request for variance

The employer has requested to use alternative means of protection for bomb squad members when responding to events which might expose them to certain kinds of chemical, biological, radiological, nuclear, and/or high yield explosive elements.

Name and address of employer

Michigan State Police

Location for which variance is requested

714 S Harrison, East Lansing

MIOSHA News Quiz

Topic: Ergonomics

By: Barton G. Pickelman, CIH
Industrial Hygiene Specialist
General Industry Safety and Health Division

Questions

- Ergonomics is:
 - How to cook, clean, and otherwise successfully manage a home or family.
 - The mechanism by which employees obtain a new work chair.
 - Fitting the task to the human.
- True or False – Employers cannot afford to address ergonomic issues in the workplace.
- Employer commitment and planning, employee involvement, training, workplace analysis, and hazard prevention and control are all elements of a successful _____.
 - Safety and health management system
 - Ergonomic program
 - Both
- True or False – According to MIOSHA or OSHA standards, an employee is not allowed to lift more than 70 pounds.
- Which of the following are ergonomic risk factors that could contribute to, and/or result in, ergonomic-related injuries/illnesses?
 - Force
 - Repetition
 - Posture
 - All of the above
- Musculoskeletal Disorders (MSDs), which are injuries and disorders of muscles, nerves, tendons, ligaments, joints, cartilage and spinal discs, have also been called?
 - Cumulative trauma disorders
 - Repetitive trauma disorders
 - Repetitive strain injuries
 - All of the above
- To help prevent swelling within your wrist's carpal tunnel, when typing your hands should be positioned in relation to your wrists?
 - With your hands bent up (extension)
 - With your hands bent down (flexion)
 - With your hands in line with your forearm (neutral)
- True or False – Workstations should be designed for the 5th percentile female (i.e., smallest) up to the 95th percentile male (i.e., largest).
- Which of the following are major ergonomic hazards found in the construction industry?
 - Lifting heavy and awkward materials repeatedly
 - Bending forward in a static position
 - Working with the hands above the shoulders
 - Carrying heavy and awkward materials over obstacles and uneven or sloped ground
 - All of the above

- Which is the better tool to evaluate ergonomic risk factors associated with a particular job or task: the stopwatch or the video camera?
 - Stopwatch
 - Video camera
 - Both
 - Neither
- True or False – At the time of this publication, the state of Michigan has an ergonomic standard in effect.
- True or False – MIOSHA currently has the ability to issue citations for ergonomic hazards.
- Where can employers and employees obtain information on ergonomics?
 - MIOSHA Consultation Education & Training Division
 - Certified Professional Ergonomists (CPEs)
 - MIOSHA, OSHA, and NIOSH Websites
 - All of the above

Answers

1. C – Ergonomics, simply put, is fitting the task to the human. However, in some instances employees have obtained a new work chair as a result of an ergonomic intervention.
2. False – By addressing ergonomic issues in the workplace, not only are injuries/illnesses prevented and controlled but also productivity, quality, and delivery typically improve resulting in decreased costs and higher profits. Some would say you can't afford not to address ergonomic issues in the workplace.
3. C – Both.
4. False – There are no MIOSHA or OSHA standards that limit the amount of weight an employee can lift. There are guidelines such as the NIOSH Revised Lifting Equation that will provide a recommended weight limit based upon a frequency of lift, distance of lift, type of grip on object).
5. D – Force (how much you lift, pull, push), repetition (how often), and posture (body position) are all ergonomic risk factors. Any of these risk factors alone or in combination can cause injuries/illnesses.
6. D – All of the above.
7. C – To help prevent carpal tunnel syndrome during typing, your hands should be positioned so they are in line with your forearm. Having extreme extension or flexion causes pressure in the carpal tunnel.
8. True – By designing workstations to fit the 5th percentile female up to the 95th percentile male, the workstations will be very functional and comfortable for all but a small fraction of the workforce.
9. E – All of the above.
10. Video camera – Bringing a stopwatch to a workstation may indicate to employees a time study is being performed for productivity purposes. Employees may be less skeptical if a video camera is used; besides you can use the stopwatch while viewing the video.
11. False – There is no ergonomic standard currently in effect; however, there is an Ergonomics Standard Advisory Committee comprised of various industry and labor representatives that meets monthly to develop language and appendices for a proposed standard.
12. True – MIOSHA has issued citations for ergonomic hazards by using Section 11(a) of Act 154, commonly known as the General Duty Clause, which states employers must furnish a place of employment free from recognized hazards.
13. D – All of the above. The MIOSHA website address is www.michigan.gov/miosha.

Ask MIOSHA

Interactive Q&A Now Available

Employers, workers and others now have the ability to submit questions to MIOSHA electronically through our website, www.michigan.gov/miosha.

"Ask MIOSHA" was recently added to the website to create an easy method to submit and receive written responses to questions on MIOSHA standards and requirements. Look for the feature on the MIOSHA home page.

Common workplace safety and health issues have been identified for both general industry and construction. The electronic form will send the question to a MIOSHA staff person designated as a resource for the topic area.

Responses are intended to provide quick access and answers to questions and are informational only.

In addition, the "Inside MIOSHA" section includes "MIOSHA Standard Interpretations" and "Frequently Asked Questions." Users are encouraged to check these resources first, to see if their question has been addressed prior to submitting it.

Christman Partnership

Cont. from Page 1

DLEG Acting Deputy Director **Doug Kalinowski**. “Through partnerships, MIOSHA can offer employers a cooperative relationship to help eliminate serious hazards and achieve a high level of safety and health. We commend Christman for bringing together over 50 organizations to promote and support safety on this project.”

Zero Injuries the Ultimate Goal

The Michigan Street Development safety partnership agreement states, in part: “The active integration of the Christman project-specific safety and health program with this partnership will endorse the ultimate goal of zero injuries.” Further: “The partners agree to establish a partnership based on mutual respect and trust that leverages the resources of all the parties through the systematic anticipation, identification, evaluation, and control of health and safety hazards present in the project.”

Some of partnership elements include:

- Mandatory attendance at a project safety orientation, which includes project overview, project specific safety video and testing at completion of session.
- 100 percent MIOSHA compliant fall protection plans to be implemented by each trade contractor for work over six (6) feet.
- Hardhats and safety glasses required 100 percent of the time while working on the site.
- All tower crane operators will be Certified Crane Operators (CCO), as recognized by the National Commission for the Certification of Crane Operators (NCCCO).
- Mandatory post-accident substance abuse testing.
- A progressive discipline action plan will be enforced by Christman and partnering employers.

The partnership does not preclude MIOSHA from enforcing its mission of addressing complaints, fatalities, or serious accidents, nor does it infringe on the rights of employees to report workplace hazards.

Partnering Employers to the Agreement

Christman Constructors, Inc.; Christman

Concrete Industrial Floors, LLC; Grand River Construction; Allied Mechanical Services, Inc.; Applied Handling, Inc.; Andy J. Egan Company, Inc.; Architectural Glass & Metals, Inc.; Architectural Metals, Inc.; Brigade Fire Protection; Burggrabe Masonry, Inc.; Contract Specialties, Inc.; Dykema Excavators; Fence Consultants of West Michigan; Feyen-Zylstra, LLC; Fountain Technologies, LTD; H&H Painting Company, Inc.; Harder & Warner, Inc.; Kiewit Construction Company; Lynn Masonry; Modern Roofing, Inc.; NES – Traffic Safety; Overhead Door Co. of Grand Rapids; Otis Elevator; Pioneer Construction; Pro Line Painters, LLC; Ritsema Associates; SA Morman; Schindler Elevator Corporation; Schnabel Foundation Company; Sobie Company; Steel Supply & Engineering Co.; The Bouma Corporation; Traffic & Safety Control; Van Dam Iron Works; Van Haren Electric, Inc.; Van Dellen Steel, Inc.; Vos Glass; Van Laan Concrete Construction, Inc.; Western Waterproofing; and Worksmart, Inc.

Supporting Partners to the Agreement

Associated Builders and Contractors (ABC), Inc., Western Michigan Chapter; AGC Mid-Michigan Chapter; Accident Fund Insurance Company of America; Carl Walker, Inc.; City of Grand Rapids; Curtain Wall Design & Consulting, Inc.; Fleis & Vandenbrink Engineering, Inc.; Michigan Department of Transportation, Michigan State University; Robert Darvas Associates PC; RDV Corporation.; Sims Moelich Associates, LTD; Spectrum Health; Soil and Materials Engineers, Inc.; URS Corporation; and Van Andel Institute.

“The connection of this project to our very busy Butterworth Campus mandates that the health and safety of the workers and others affected by this project be the highest priority,” said **Bill Rietscha**, Spectrum Health vice president of facilities. “We commend Christman and MIOSHA for developing this innovative partnership to help ensure the well-being of all involved, and are proud to be among its supporting partners.”

Newsmaker of the Year

The Michigan Street Development project, recently named the “*Newsmaker of the Year*” by the Grand Rapids Business Journal, will ultimately include a medical office, academic and research facility consisting of roughly 740,000 s.f. in four buildings, and a 2,300 space, four-story parking deck. The project is located on Michigan Streets between Division Avenue and Coit Street.

Now underway is the \$100 million first phase consisting of the four-story parking struc-

ture, the approximately 280,000 s.f. Lemmen-Holton Cancer Pavilion, and the “25 Michigan Street” building, a seven-story medical building likely to contain a hotel on the upper floors.”

The Christman Company, with over 180 employees, is a full service construction services firm, offering construction management, general contracting, design/build services, and real estate development. Founded in 1894, Christman has grown to become one of the Midwest’s leading construction firms, serving the healthcare, educational, historic restoration, industrial, institutional, and other commercial market sectors.

Christman’s safety programs were recently honored with the *MIOSHA Gold Award* for more than 2.1 million hours worked without a lost-time accident as well as the Accident Fund Insurance Company of America’s first-ever “*Policyholder of the Year*” award for an exemplary low claims record out of 45,000 workers compensation insurance policyholders. ■

**“Take a Stand Day”
for
Workplace Safety & Health
August 15th**

MIOSHA will dedicate more than 125 professional staff to visit Michigan high-hazard companies on August 15th, during the third annual “**Take a Stand Day**.”

This unprecedented campaign offers employers the opportunity to partner with MIOSHA—with **no fines or penalties**—to improve their work environment.

To request a visit, contact the CET Division at 517.322.1809, or visit our website, www.michigan.gov/miosha.



More than 50 employers and supporting organizations signed the historic partnership to protect workers on the Michigan Street Development Project.



Barton-Malow/White Construction participated in the 2006 “Take a Stand Day” at their Providence Hospital worksite, in Novi. Included in the photo are reps from Liberty Mutual Insurance, Barton-Malow, Site Dev. Corp., Midwest Steel, and Center Line Electric.

Construction Season 2007

Cont. from Page 4

Vehicles and Equipment

Vehicle safety hazards include workers pinned by construction vehicles, struck by swinging backhoes, crushed by overturned vehicles, or struck by vehicles on public roadways. MIOSHA Construction Standard, Part 13, Mobile Equipment, addresses safety requirements for a variety of equipment used at construction worksites.

To avoid hazards:

- Wear seat belts, when appropriate.
- Check vehicle before each shift.
- Maintain safe speeds.
- Use safely constructed and maintained roadways or grades.
 - Do not drive in reverse gear with an obstructed view, unless there is an audible reverse alarm, or another worker signals that it is safe.
 - Ensure personnel stay clear of dumping or lifting devices.
 - Lower or block bulldozer and scraper blades, end-loader buckets, dump bodies, etc. Leave all controls in neutral position when not in use. Set parking brakes and chock if on an incline.
 - Protect the driver of haulage vehicles from falling material with an over-head shield or canopy and do not overload.
 - Do not carry personnel unless there is a safe place to ride.
 - Use traffic signs, barricades or flaggers when near public roadways.
 - Ensure workers are highly visible.

Strategic Initiatives – Health

MIOSHA initiatives for health in construction identify the five most frequent areas of exposures and illnesses:

1. **Lead,**
2. **Silica,**
3. **Asbestos,**
4. **Noise,** and
5. **Isocyanates.**

Exposure to asbestos fibers, and overexposure to lead and silica, can cause disabling and sometimes fatal lung diseases. Excessive noise exposure can cause hearing loss. Exposure to isocyanates can cause serious health and respiratory effects.

Lead Exposure

Lead is a common additive in materials including paint, welding wire, solder used on tinplate and copper pipe joints, tank linings and electrical conduit. MIOSHA Health Standard, Part 603, Lead Exposure in Construction, applies to all construction work operations where an employee may be occupationally exposed to lead.

The best way to prevent over-exposure to lead is to install and maintain engineering controls to eliminate or reduce the hazard. Examples of engineering and other controls include:

- Conduct bulk material analysis to de-

termine if lead is present.

- Comply with all requirements of Part 603.
- Provide interim protection until air monitoring determines exposure levels.
- Use exhaust ventilation and dust collection systems.
- Use wet methods or a vacuum equipped with a high efficiency particulate (HEPA) filter to clean work areas. Do not dry sweep or use compressed air.
- Use respiratory protection when engineering and work practice controls cannot be used or do not reduce exposure to an acceptable level.
- Establish a regulated area to prevent unprotected employees from entering the exposure area when respirators are used.

Silica Exposure

Silica is a major component of sand, rock and mineral ores. Activities with potential for exposure are: abrasive blasting, masonry work, jack hammering, and when masonry material is drilled, cut, broken or processed producing airborne dust.

Employees must be trained on the hazards of exposure to silica in accordance with MIOSHA Health Standard, Part 430, Hazard Communication. The best way to prevent over-exposure to respirable crystalline silica is to install and maintain engineering controls, including:

- Utilize abrasive blasting materials with <1% crystalline silica.
- Use exhaust ventilation and dust collection systems.
- Enclose cabs on machinery to prevent operator exposure.
- Use wet methods to keep dust to a minimum. Do not dry sweep or use compressed air to clean work areas.
- Use work practice controls such as opening doors and windows to provide general ventilation and stay up-wind of a dusty operation.
- Provide respiratory protection when engineering and work practice controls cannot be used or do not reduce the dust to an acceptable level.
- Establish a regulated area to prevent unprotected employees from entering the exposure area when respirators are used.

Asbestos Exposure

Asbestos includes a group of naturally occurring minerals capable of separating into microscopic needlelike fibers that can remain airborne for long periods of time. If inhaled, the fibers can cause specific asbestos-related diseases.

MIOSHA Health Standard, Part 602, Asbestos Standards for Construction:

- Requires an asbestos building/facility inspection in pre-1981 buildings.
- Obligates the building/facility owner to notify employees and contractors working in the facility of asbestos building/facility survey results.
- If the building survey is not available, obligates contractors/employers to presume sus-

pect materials contain asbestos until a material sampling/analysis is performed.

- Specifies required work practices, protective equipment and procedures for employees removing and/or disturbing asbestos-containing/presumed asbestos-containing material.
- Requires asbestos awareness training for employees who may contact but not disturb asbestos-containing/presumed asbestos-containing material.

Note: MIOSHA also administers the Asbestos Abatement Contractors Licensing Act, Public Act 135 of 1986, and the Asbestos Workers Accreditation Act, Public Act 440 of 1988.

Noise Exposure

Excessive exposure to noise is a common construction site health hazard. Sources of excessive noise levels range from power hand tools, to large diesel powered trucks and equipment. MIOSHA Health Standard, Part 680, Noise Exposure for Construction, establishes permissible exposures limits (PEL) for continuous or intermittent noise.

To minimize noise hazards:

- Purchase quieter equipment.
- Modify old equipment.
- Locate noisy equipment behind purpose-built barriers.
- Rotate jobs so exposure times are reduced.
- Increase attention to maintenance of tools and equipment to reduce noise levels.
- Establish Noise Perimeter Zones (NPZ) to limit exposure to noisy processes or equipment to as few workers as possible.
- Use effective hearing protection when engineering and/or administrative controls do not reduce exposures within limits.

Isocyanates Exposure

Isocyanates are compounds, that when mixed with alcohol (hydroxyl) groups, react to form polyurethane polymers. MIOSHA Health Standard, Part 601, Air Contaminants for Construction, regulates employee exposure to isocyanates in the construction industry.

Exposure hazards can be minimized by:

- Exposure air monitoring,
- Engineering/work practice controls,
- Respiratory protection,
- Personal protective equipment, and
- Effective training.

Help is Available

MIOSHA safety and health standards, Construction Fact Sheets, and a Sample Construction Safety Program are available on our website, www.michigan.gov/miosha. For questions on construction standards, you can contact the **Construction Safety and Health Division at 517.322.1856.**

You can also contact the **Consultation Education and Training (CET) Division** for consultation assistance regarding MIOSHA construction safety regulations at **517.322.1809.** ■

How To Contact MIOSHA

MIOSHA Hotline	800.866.4674
Fatality/Catastrophe Hotline	800.858.0397
General Information	517.322.1814
Free Safety/Health Consultation	517.322.1809
Injury & Illness Recordkeeping	517.322.1848

Director	517.322.1814	Doug Kalinowski
Deputy Director	517.322.1817	Martha Yoder

DIVISION	PHONE	DIRECTOR
Appeals	517.322.1297	Jim Gordon
Construction Safety & Health	517.322.1856	Bob Pawlowski
Consultation Education & Training	517.322.1809	Connie O'Neill
General Industry Safety & Health	517.322.1831	John Brennan
Management & Technical Services	517.322.1851	John Peck
OFFICE	PHONE	MANAGER
Asbestos Program	517.322.1320	George Howard
CET Grant Program	517.322.1865	Louis Peasley
Employee Discrimination Section	248.888.8777	Jim Brogan
Management Information Systems Section	517.322.1851	Bob Clark
Standards Section	517.322.1845	Marsha Parrott-Boyle

Website: www.michigan.gov/miosha

If you would like to subscribe to the MIOSHA News, please contact us at 517.322.1809. Also if you are currently a subscriber, please take the time to review your mailing label for errors. If any portion of your address is incorrect, please contact us at the above number.

The Department of Labor & Economic Growth is an equal opportunity employer/program. This newsletter will be made available in alternate formats on request.



Director: Doug Kalinowski

The MIOSHA News is a quarterly publication of the Michigan Occupational Safety and Health Administration (MIOSHA), which is responsible for enforcing the Michigan Occupational Safety and Health (MIOSH) Act.

The purpose is to educate Michigan employers and employees about workplace safety and health. This document is in the public domain and we encourage reprinting.

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