MI SHA NEWS

Vol. 6, No. 4 | Michigan Occupational Safety and Health Act (MIOSHA) | Fall 2002

Roadway Work Zones

A Most Dangerous Place to Work

By Richard J. Mee, Chief
Construction Safety Division

The atmosphere was almost eerie. I couldn't hear the breeze blowing, although I could feel it on my face. I didn't hear the engines of the large plane that I saw flying low overhead as it prepared to land at a nearby airport. My senses were distorted. The ominous noises of passing traffic, roaring engines, turning wheels, and tires slapping pavement joints were a stark contrast to the clear and otherwise peaceful late summer day.

The constant din of passing cars and trucks made the ordinarily loud construction equipment seem quieter somehow. Every few moments, the sound of vehicle brakes caused heightened awareness and occasionally screeching tires caused me to react with a jerk and quickly turn around to see if a vehicle might be out of control, heading my way. I was in a freeway work zone.

Insulated inside their protective vehicle, most people don't have the opportunity to experience working in close proximity to high-speed traffic. The noise is overwhelming. Often, you have to yell in a loud voice to communicate. The noise of the traffic doesn't take breaks, stop for lunch, or leave at quitting time. The continuous stream of traffic can be unnerving; and it can be fatal.

It Happened Again

On Friday, August 9th, it happened again. A car left the traveled lanes of the roadway on I-94 in Macomb county and struck the traffic control device that two workers were installing on the shoulder of the freeway. The impact killed **Tanya Loewen** instantly, and critically injured **Bill Hattan.**

Tanya Loewen, a 26-year-old civil engineer, was a graduate of the University of Saskatchewan, Canada. While at the university she took a special interest in traffic safety. Her experience included employment with an engineering firm in Scotland. She was employed by International Road Dynamics (IRD) on a contract with the Michigan Department of Transportation to install trailer-mounted computerized safety systems on I-94.

"She was doing what she believed in. She was installing equipment for workers' safety on the highway," said her boss, **Terry Bergan**, president and CEO of IRD. Her employer saw her as a dedicated and enthusiastic civil engineer.

Better traffic control devices are evolving with each passing year and recent improvements have helped to enhance worker and motorist

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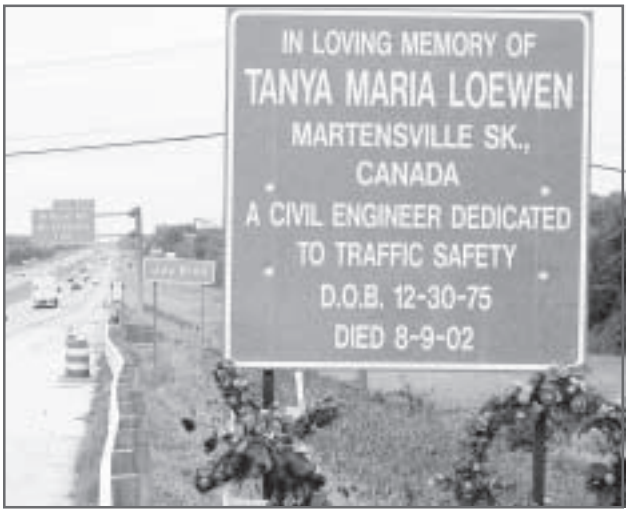

Tanya Loewen Memorial Sign, erected by co-workers on I-94 near the site of the work zone accident that took her life.

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Consumer and Industry Services

From the Bureau Director's Desk

Thank You for All the Wonderful Years!

By: Douglas R. Earle, Director
Bureau of Safety & Regulation

Farewell MIOSHA

As some of you know, I will be retiring on October 31, 2002. I have been privileged to serve as Director of the Bureau of Safety and Regulation (BSR) since 1979. I've had the opportunity of working in the MIOSHA program with the most dedicated and capable staff that anyone could possibly have.

Although I must admit there have been stressful times during my tenure, for the most part, every minute of every day has been rewarding. To have the opportunity to work in an organization whose mission and noble purpose is that of protecting human lives, health and safety has been a blessing from God. I have also had the privilege of knowing that I have made a positive difference in peoples lives.

New Standards to Improve MIOSHA

Standards do make a difference. First they protect workers, which is our primary mission. And secondly, they give the regulated community specific notice of their responsibilities. Leaving enforcement in some of these areas to the "general duty" requirements has failed. It simply doesn't work effectively in most cases, and it certainly provides employers with little specificity concerning their responsibilities.

Specifically, I would like to see MIOSHA promulgate the following standards. In Construction Safety there is a need for standards to address: Sanitation, Communication Tower Erection, and Lockout/Tagout for construction. Moreover, the varying array of heights for fall protection in construction is confusing and not effective. I believe that a seven foot requirement for using fall protection for all construction workers, regardless of trade or job activity, should be promulgated by MIOSHA and OSHA.

In General Industry Safety the following standards are needed: Vehicle Safety and Violence in the Workplace. With regard to Occupational Health, standards are needed for: Biological Hazards and Exposure to Isocyanates, In all three areas, there is a need for an Ergonomics standard, and a Workplace Safety and Health Program standard.

New Legislation to Improve MIOSHA

Over the years, MIOSHA has been instrumental in helping Michigan employers provide safe and healthy workplaces. There is, however, always room for improvement. The legislation suggested below would help employers provide a safe and healthy workplace.

- Require those who produce products, and more importantly, those who design systems, to incorporate worker safety and health protection as part of their product or system design. Retrofitting to improve worker safety and health is inefficient, often unsuccessful, and, in many cases, impractical. MIOSHA should not, however, have any pre-approval and/or licensing authority for such products or systems.
- Workers' compensation laws need to be amended to provide for an "integrated disability management" approach to compensate injured workers for lost wages and medical costs. At Steelcase in Grand Rapids, any worker who is injured, regardless of where the injury occurred, is compensated for lost wages and any medical costs based upon the injury or illness. Such an approach would eliminate the arguments regarding where did the injury occur, what was the source of the injury, and who is responsible for the associated costs. These all present obstacles to OSHA in attempting to administer workplace safety and health.
- Legislation is needed to provide employer incentives for achieving workplace safety and health beyond those already available, such as: lowered costs, rebates, insurance, and increased productivity. Additional incentives could take the form of tax incentives or other positive incentives that employers could obtain for achieving improved occupational safety and health.
- Owners and general managers must be made responsible under OSHA and MIOSHA for hazards that their actions create. This is particularly obvious in construction where owners and general contractors often set unrealistic deadlines for the completion of work. This places the subcontractors in an extremely difficult position, indeed, an almost untenable position. There needs to be a way under the OSHA Act, or perhaps through some other means of negative taxation, to hold the employer, owner, general manager, general contractor responsible.

An area that needs close examination is the practice by departments of transportation, including the Michigan Department of Transportation, of providing early completion incentives to contractors for highway construction jobs. In my view, this practice has led to a number of injuries and fatalities in the last several years in highway construction in Michigan. Either the practice needs to be refined so that it does not lead to unsafe practices in its application, or it needs to be eliminated.

The Future of Workplace Safety and Health

MIOSHA has made a remarkable impact on worker health and safety in this great state. Injury and illness rates have gone down along with workplace fatalities. Indeed, MIOSHA has helped reduce program-related fatalities nearly 50 percent, since we began tracking them with a uniform system and definition in 1976.

Many old hazards have been reduced significantly or eliminated all together. Regrettably, many new hazards have taken the place of those we have helped to conquer. Many more challenges lie ahead. A number of us still believe that zero injuries, as well as zero fatalities, is achievable and must remain our ultimate goal. With high quality and committed staff, MIOSHA and federal OSHA have a bright future in their quest to help employers and employees reduce injuries, illnesses, and fatalities in the workplace.

I am pleased to announce that Douglas Kalinowski will become the BSR Director when I retire. He has been the BSR Deputy Director of Compliance since 1996. Doug is a dedicated professional who, along with the rest of the MIOSHA staff, will work diligently to help employers and employees provide a safe and healthy work environment.

I am moving on now to other challenges in life. I must, therefore, say farewell as Director of the MIOSHA program. Thank you for all the wonderful years! God Bless you All and God Speed.

Douglas R Earle

Congratulations Dow Ludington!

Dow Cal/Mag Ludington Plant becomes the first chemical manufacturer in the state to receive the MVPP Star

Dow Chemical Company's Cal/Mag Ludington Plant has become the first chemical manufacturer in the state to receive the prestigious Michigan Voluntary Protection Programs (MVPP) Star award for workplace safety and health excellence. CIS Deputy Director **Kalmin Smith** presented the Star flag at a special ceremony today on behalf of the Michigan Department of Consumer & Industry Services (CIS).

"The Dow Chemical Company is an outstanding corporate leader in Michigan and we're honored to present the Dow Ludington Plant with Michigan's highest safety and health award," said Smith. "Their exceptional leadership in safety, health and the environment is a strong corporate example for all Michigan businesses."

MIOSHA established the MVPP program to recognize employers actively working toward achieving excellence in workplace safety and health. It was developed in 1996 to reward private and public sector work sites that develop and implement outstanding safety and health programs that go beyond MIOSHA standards.

Employees raised the MVPP Star flag during the ceremony. Accepting the Star award were **Jeff Contardi**, EH&S Delivery Leader, as well as EH&S employees **Lisa Rokosky**, **Allen Arneson, Greg Dykstra**, and **Rick Treesh**. State and local elected officials, corporate leaders, as well as CIS and MIOSHA representatives, were on hand to congratulate the Ludington Plant employees and management on their outstanding achievement.

"We have a corporate policy that states protecting people and the environment will be part of everything we do and make," said **Mike Miller**, Manufacturing Leader, Dow Ludington Plant. "We are extremely proud that our employees are being recognized for their outstanding efforts and leadership to continuously improve our safety and health performance."

The site uses Dow Global Work Process, complying with corporate and MIOSHA safety requirements, including approximately 60 corporate safety standards. Based on interviews with employees and observation, MIOSHA found that employees are empowered to be "safety directors," and to integrate safety and health into all aspects of their operations. Strong safety and health leadership was evident in all phases of the management system–there was a clear sense that employees recognize that safety is a core company value that will not be compromised.

CIS Deputy Director Kalmin Smith (far R.) presented the MVPP Star Flag to (from L.) Abe Williams, Allen Arneson, Lisa Rokosky, Jeff Contardi, Rick Treesh, and Greg Dykstra.

The MVPP Review Team consisted of: **Doug Kimmel**, CET Safety Consultant and Team Leader; **Mike Mosher**, CET Health Consultant; **David Luptowski**, CET Safety Consultant; and **Sherry Walker**, CET Health Consultant. The MVPP Team conducted 66 interviews with management, health and safety personnel, operators, maintenance personnel, medical staff, union representatives and a contractor.

"Your involvement in the MVPP program and the trust and cooperation upon which it is based demonstrates that the implementation of an outstanding safety and health program is an admirable and achievable goal," said MIOSHA Director **Doug Earle**.

The Ludington plant has 240 employees, with approximately 140 represented by the United Steel Workers of America, Local 12773–both union and management confirmed that they work together toward mutual goals. All employees take "ownership" of the site's safety and health management system and all employees are encouraged to take a proactive personal interest in hazard prevention and control. There is an electronic safety suggestion program, as well as a near-miss reporting and tracking system.

Employees, elected officials and guests celebrated the presentation of the MVPP Star award to Dow Chemical Company's Cal/Mag Ludington Plant.

Contractors are also required to have a comprehensive safety program, with an injury/illness rate below their industry average. Contractor orientation and training is very thorough, and includes an eight-hour safety awareness course, as well as the Dow Ludington safety orientation course. They also pre-plan each job, to assure that hazards are identified and eliminated before the job is started.

The Ludington Plant's Incidence Rates and Lost Work Day Rates are significantly below the Michigan average for their industry and Standard Industrial Classification (SIC) code 2819, "Industrial Inorganic Chemicals, Not Elsewhere Classified." The Total Case Incidence Rate for the Ludington Plant was 2.3 in 1999, 3.0 in 2000, and 2.4 in 2001–compared to 4.2, 5.3, and 5.3, respectively, based on national Bureau of Labor Statistics (BLS) data. The Total Lost Work Day Cases for the Ludington Plant was 1.2 in 1999, 1.9 in 2000, and 0.8 in 2001–compared to 2.1, 2.1, and 2.1, respectively, based on BLS data.

The Ludington plant produces Dow's trademark products PELADOW*, DOWFLAKE* and LIQUIDOW* calcium chloride, magnesium hydroxide, bromine and bromine derivatives. Dow Chemical Company is a leading science and technology company that provides innovative chemical, plastic and agricultural products and services to many essential consumer markets. With annual sales of $28 billion, Dow serves customers in more than 170 countries. Committed to the principles of Sustainable Development, Dow and its approximately 50,000 employees seek to balance economic, environmental and social responsibilities. There are five Dow sites in the national VPP program. ■

MIOSHA Warns Businesses to Be Wary of Deceptive Worker Safety Marketing Tactics

By: Douglas Kalinowski, Deputy Director
Bureau of Safety & Regulation

MIOSHA is warning businesses to beware of individuals using deceptive tactics to market safety and health services in Michigan. MIOSHA has received several complaints of individuals contacting employers and posing as a MIOSHA representative or affiliate. The phony representative then attempts to pressure the company to sign a contract to perform safety and health services.

"Impersonation of a state employee is simply intolerable," said MIOSHA Director **Doug Earle**. "The MIOSHA program provides extensive education and training services. However, these services are provided free to employers–our safety and health consultants do not use the threat of a MIOSHA inspection to market these services."

MIOSHA became aware of this situation when companies called to complain about the tactics. These companies stated the individuals not only identify themselves as MIOSHA representatives, but in some instances carry a booklet with a MIOSHA logo and a photograph of MIOSHA Director Doug Earle. The phony MIOSHA representatives state that they can provide a certificate, which will prevent the state from taking further action in the event it initiates a MIOSHA inspection.

One Company's Experience

On Aug. 5, 2002, **Suellen Cook**, a Consultation Education & Training (CET) Division Safety Consultant assigned to Wayne County, made an unscheduled visit to **Gouth Sheet Metal and Heating** in Wyandotte to introduce herself and the availability of CET services. Gouth is a privately owned business with five employees. During this visit, **Tom** and **Cindy Gouth, Owner/Operators**, explained they were not surprised by a MIOSHA visit because the firm had been called on by a private safety and health consulting company several months earlier, and the representative had offered to inspect the 8,000 square foot plant for approximately $3,500.

The consulting firm required full payment for the survey within several days. Additionally, this consulting representative aggressively insinuated that if the offer for the plant inspection was rejected, MIOSHA would be contacted by the consulting firm and Gouth Sheet Metal and Heating would be visited by a MIOSHA representative and heavily fined for any violations.

Ms. Cook explained that neither private safety and health consulting firms nor MIOSHA can use extortion as a marketing tool for their services. The Gouth's were familiar with the MIOSHA program and had attended a CET seminar given by CET Safety Consultant Richard Zdeb in Clarkston. They decided to have Suellen Cook conduct a hazard survey for them following their initial meeting.

Several CET Division consultants have received similar complaints from other companies. The General Industry Safety Division has also received recent complaints from employers who said they had been contacted by individuals who insist they must use their health and safety audits to come into compliance with MIOSHA.

MIOSHA Inspection Policy

In order to effectively check for conditions that could endanger the well being of employees, MIOSHA may inspect, with few exceptions, any work operation in the state of Michigan. In addition to responding to complaints, accidents and referrals, MIOSHA also conducts inspections at establishments that have the most safety problems.

MIOSHA uses a data-based history to target inspections at companies with high injury and illness rates, while avoiding inspecting companies that are providing a safe and healthy work environment. MIOSHA targets worksites where an inspection may provide the necessary incentive for positive change.

During a MIOSHA inspection, a safety or health officer arrives unannounced and begins with an opening conference by explaining the inspection purpose and format. Upon completion of the officer's explanation and review of records, a walk-through of the facility usually takes place. Conditions that could endanger the health or safety of employees are pointed out, and worker exposure information is taken if necessary. After the closing conference to discuss the findings, the officer's report is reviewed, which helps ensure uniformity and consistency of the application of MIOSHA procedures and processes.

All MIOSHA employees carry a photo ID, issued by the Bureau of Safety and Regulation. If a business is contacted by a MIOSHA representative, we are advising employers to **carefully check IDs** to be sure they are dealing with a legitimate MIOSHA representative.

Attorney General's Response

Information provided to MIOSHA by employers like the Gouth's have been invaluable to help MIOSHA deal with these deceptive practices. After the first group of complaints, MIOSHA management referred the complaints, with specific details, to the Attorney General's office.

On March 5, 2002, Assistant Attorney General **Richard Gartner** sent a letter to the company regarding the false and deceptive practices of their employees, or independent contractors. Mr. Gartner stated that the false representations must cease immediately.

After receiving several new complaints, Mr. Gartner again notified the company on Aug. 28, 2002. His letter stated that MIOSHA continues to receive complaints of false representations and deceptive tactics. In conclusion Mr. Gartner stated, "Legal action will be taken by this office if these actions continue."

CET Services

The **MIOSHA Consultation Education & Training (CET) Division** provides voluntary education, training and consultation services at no cost to employers. The CET Division also targets its outreach services to those companies with the greatest need. Employers can call the CET Division to request MIOSHA safety and health services at **517.322.1809**. ■

CET Safety Consultant Suellen Cook meets with Virgette Sutton, Industrial Health and Safety Administrator, L&W Engineering, Plant 2, Belleville, to discuss their recent hazard survey.

Attention!

MIOSHA does not condone the use of extortion or the impersonation of MIOSHA personnel to promote any products or services.

If your company has been a target of false or deceptive marketing tactics, please contact the Director's Office immediately at 517.322.1814.

Minor Tool Changes & Adjustments

Is Lockout Required?

By: Martha Yoder, Chief General Industry Division

If the work activity is simply a minor adjustment or tool change, is full compliance with the provisions of MIOSHA Part 85., Control of Hazardous Energy Sources, required? The answer is that it depends!

Part 85., commonly referred to as the Lockout-Tagout standard, contains an exception for minor tool adjustments and changes. The exception states that the minor tool adjustment or change or minor serving activity must take place during normal productions operation and must be routine, repetitive, and integral to the use of the equipment for production. If the work activity meets both conditions, then an employer may use alternative measures in lieu of full compliance with the lockout-tagout standard.

The Lockout-Tagout standard allows an exception for minor tool changes and adjustments with the use of alternative protective measusres.

Three-Part Test

To determine whether the exception applies, employers must apply a three-part test.

1. Is the task a minor tool change or adjustment or minor servicing activity?

2. Is the task:

Routine: The activity must be a regular course of procedure and in accordance with established practices.

Repetitive: The activity must be repeated as part of the production process or cycle.

Integral: The activity must be inherent to the production process.

3. Is the task performed using effective, alternative, protective measures?

The exception is intended to sustain the machine within the acceptable performance range and output quality. It is part and product oriented rather than repair oriented.

If the answers to all three of the questions above are "yes," then the exception applies and the employer may use alternative measures in lieu of full compliance with the lockout-tagout standard.

Assessing the Risk

The first step in determining acceptable alternative measures is to conduct a risk assessment of the process. There are a variety of risk assessment models that can be used to help with this process.

Review Tasks: In general, risk assessment begins with a review of all tasks and activities to determine those that may be considered minor tool changes, adjustment, and minor serving activities.

Identify Hazards: Hazards, such as mechanical, electrical, thermal, pneumatic, hydraulic, radiation, residual or stored energy, motion, fuels, and human factors, associated with each task shall be considered. There may also be associated hazards for a particular task not related to hazardous energy release which may also need to be reviewed.

Assess Potential Consequences: The severity of injures to all persons that could be harmed by the hazards must be considered. The most severe injury that can reasonably be expected to result from the exposure must be used to determine the protective requirements.

Assess Potential Exposure to the Hazards: Consider the potential exposure of all persons to the hazards identified. This assessment shall consider the nature, duration, and frequency of exposure to the hazards.

Assess Probability of Occurrence: To thoroughly assess the probability, there are a number of areas that must be reviewed. Consider the safeguards, safety devices, and safety systems either in use or that will be used. Check the past reliability and potential for failure, operational or maintenance demands of the task, and the likelihood of defeating the safeguards. In addition, review the accident history relating to the task, activity, machine, equipment, and process. The training, proficiency, and competence of all persons

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These questions can help determine if a task is a minor tool change.

- How long does the task take?
- Is the task relatively minor in nature?
- Does the task involve no, or only minor, disassembly?
- Does the task occur frequently during the day, shift, or week?
- Does the task exist even when things are operating normally?
- Does the task occur on a regular, predictable basis?
- Is the task normally performed by the operator?
- Is the task conducted using parts and tools readily available to the operator?
- Does the operator require specific training for the task?
- Does the task minimally interrupt the production process?
- What happens if the task is not performed?

These questions can help determine what protective measures should be taken.

- Are there established procedures for this task?
- Are the operator and other employees trained on this task?
- Are there other established energy control procedures for more involved tasks on this machine?
- Is the operator trained to know the difference?
- What control state is the machine put into?
- Is any control input required? (Cycle stop/ emergency stop)
- What energy state does this leave the machine in?
- How does the operator verify this/
- How can the operator monitor the energy controls?
- What guards must be opened/removed?
- Are the guards interlocked?
- If interlocked, how are the interlocks integrated into the control system?
- Are any other emergency control measures instituted?
- Is partial activation possible of necessary during the task?
- What steps must be followed to return the machine to operation?

An Ergonomics Case Study

TG Fluid Systems of Brighton Uses Exercises to Dramatically Reduce their Ergonomic Injuries

By: Karen Odell, Safety Consultant
Consultation Education & Training Division

Ergonomics has become a common word in the workplace today. It is frequently defined as the "fit between worker and work." Ergonomic-related injuries and illnesses remain a serious problem in Michigan. More than half of the total workers' compensation cases each year are related to ergonomics. In 2000, there were 66,827 Form 100 work-comp cases, and 33,999 were ergonomic-related.

Reducing Ergonomic Risks

MIOSHA is committed to helping employers reduce the risk factors associated with musculoskeletal disorders (MSDs). There is extensive evidence today that an ergonomics program can dramatically reduce injuries, cut workers' compensation costs, increase productivity, and decrease employee turnover.

An ergonomics program offers significant health improvements to workers and significant savings to employers. It is part of a comprehensive safety and health program. The basic elements of a safety and health program include:

- Management commitment,
- Employee involvement,
- Worksite analysis,
- Hazard prevention and control, and
- Safety and health training.

MSDs occur when there's a mismatch between the requirements of a job and the physical capacity of the human body. Many injuries result from repetitive motion activities that produce wear and tear on the body. Effective ergonomic interventions include integrated solutions that address equipment designs and work procedures. The solutions can be simple and inexpensive.

Employees at TG Fluid Systems participate in stretching exercises before their shift.

Identifying Ergonomic Injuries

TG Fluid Systems in Brighton has had great success with their safety and health program, particularly in identifying and preventing ergonomic injuries. TG Fluid Systems started in 1996 as Eagle-Picher, with a name change in 2000. TG Fluid Systems is a manufacturer of plastic fuel and vapor line assemblies for the automotive industry. Today they have 65 full-time employees working three shifts.

In 1998, after reviewing their MIOSHA Injury/Illness Log, TG Fluid Systems found that 20 of the 30 recordable injury/illnesses were repetitive motion injuries. They decided to take action to reduce those injuries. "When we discover a problem, we attack it," said **Ron Buck**, Tooling/Maintenance Manager & Safety Coordinator.

As they reviewed their records, the area identified with the most problems was the forming process for plastic lines. During this process, employees put plastic tubing into a form, send them through an oven to be heated, and then remove them once they've cooled. The employees use various hand movements and apply pressure to push and bend the tubing into the form.

This is the area where TG Fluid Systems concentrated their efforts. Like many companies, job rotation was the first step they took to address MSDs in the plastic lines. However, they wanted to do more, so they invited the University of Michigan Center for Occupational Rehabilitation and Health to conduct a trend analysis.

The U of M team evaluated injuries that resulted in clinic care for employees, to see if any trends could be identified. The study reinforced the company assessment that the injuries were occurring in the forming process line. The researchers recommended that strengthening and stretching exercises be done at the beginning of each shift.

Initiating Ergonomic Improvements

When they began the exercise program, all production employees did five minutes of strengthening and stretching exercises at the start of their shift. Shortly after, they eliminated the strengthening exercises and concentrated on the stretching exercises. The exercises are done by pulling an elastic band apart, both in front of and behind the body, stretching the arms and wrists. The employees said the exercises really do help.

TG Fluid Systems also examined engineering controls. They evaluated the work stations that employees use and made some changes with tools and table height. For new jobs, they designed work stations to try and eliminate some of the repetitive motions with automation.

These successful ergonomic changes are a direct result of TG Fluid Systems' comprehensive safety and health program. As part of that program, Ron Buck holds safety meetings once a month for all production employees, covering different safety topics throughout the year. They also have an active safety committee, which consists of two employees from each shift and management personnel.

In 1998 they started an employee involvement program. Employees are able to give their input, recommendations and suggestions for all areas of safety and health. Many suggestions have been implemented and have enhanced job performance.

TG Fluid System employees believe their stretching exercises really help.

Evaluating the Results

The Human Resources Department handles the recording of all injuries and illnesses. **Marlene Hardesty**, Human Resources Manager, provided the injury and illness records for this article. From 1998 to 2001, TG Fluid Systems doubled their number of employees, and at the same time decreased the number of cumulative trauma injuries. In 1998 they had 768 restricted days–in 2001 that number was reduced to 22.

Even with this significant decrease, TG Fluid Systems is continuing to work on improving their work processes.

The Consultation Education & Training (CET) Division provides a range of services to assist employers and employees who wish to reduce or eliminate ergonomic injuries in their workplaces. All of these are voluntary services, and may be obtained without charge by contacting the **CET Division at 517.322.1809.**

MIOSHA CET Grants also provide training and assistance on ergonomic issues. For information, see the article on Page 9. ■

The Bottom Line

Workplace Safety and Health Makes Good Business Sense

Keykert USA, Inc. - Webberville Plant

Keykert USA, Inc., is a subsidiary of the Kiekert Group, headquartered in Germany, and began operations in the U.S. just over 10 years ago. The Webberville facility produces automobile locking systems for cars of the world, and is Keykert USA's only manufacturing plant in the U.S

Keykert USA produces complete locking systems for devices that open, close, lock and unlock cars. Their primary automotive customers include Ford, Mazda, Saturn, Jaguar, and General Motors. Keykert has two facilities in the U.S. The Wixom site is dedicated to research and development, and prototype engineering and testing.

The Webberville facility has seen extensive growth since the plant was built in 1997. Production began in late 1998, and their workforce more than doubled in 1999 and 2000. Currently, Keykert is the city of Webberville's largest employer–with over 300 employees. Keykert USA is certified to the QS-9000, ISO14001 Standards, and a member of the Michigan Business Pollution Partnership (MBP3).

Health and Safety Policy

It is the policy of Keykert USA, Inc. to protect the health and safety of its employees, protect the health and safety of the public, and protect the natural resources that may be impacted by the company's activities. Keykert USA is dedicated to protecting the health and welfare of all employees in the workplace.

They follow recognized safety and health practices to identify safety and/or health hazards, and then initiate action that will eliminate or control the unsafe condition. Keykert employees are required to obey all health and safety policies and procedures, and to conduct their jobs in a safe and healthful manner. Employees are responsible for actively participating in the continuous safety improvement process. Keykert USA places safety as its primary objective in the operation of its business and continues to strive for accident-free performance.

Safety Achievements

On, Oct. 25, 2001, the Webberville plant received the **Bronze Award** from the Consultation Education & Training (CET) Division for an outstanding safety and health record. CET Safety Consultant **Debra Gundry** has conducted supervisory training and specific standards training, such as lockout/tagout, for the company.

"Keykert USA is an outstanding economic success story in Michigan," said CIS Deputy Director **Dr. Kalmin Smith** during the award presentation. "Since 1999, the Webberville plant doubled the size of its workforce, while at the same time its lost-time injuries were cut in half."

CIS Deputy Director Smith presented the award to **Ken Yungkans**, Plant Manager. Yungkans credits the efforts of EHS Coordinator **Kathy Gurnee**, the plant's **Safety Committee** and the **entire production team** for the accomplishment.

Since receiving the Bronze Award in 2000, Keykert has continued to see significant improvements. In 2001 recordable injuries were reduced, restricted duty workdays decreased and their lost workday case rate decreased nearly 25 percent. The total number of days lost due to occupational injuries decreased from 101 in 2000 to just 36 in 2001–a decrease of nearly two-thirds!

Kathy Gurnee attributes their success to the extensive safety training and awareness for all employees. "The ergonomic workstations, job rotations, an aggressive case management of work related injuries, and job coaching restricted employees has contributed to our success," states Gurnee. Implementing a Safety Committee also has employees actively involved.

"The safety of our people really is our number one concern here. We're living proof that improved quality and improved efficiency, don't have to come at the expense of our employees' well-being," said Yungkans.

These Keykert employees are working on the NGL11 Lower Line, which makes power locking systems for the Ford Escape, Mazda Tribute, Lincoln LS, Jaguar, and Transit vehicles.

This column features successful Michigan companies that have established a comprehensive safety and health program which positively impacts their bottom line. An accident-free work environment is not achieved by good luck—but by good planning! Creating a safe and healthy workplace takes as much attention as any aspect of running a business. Some positive benefits include: less injuries and illnesses, lower workers' compensation costs, increased production, increased employee morale, and lower absenteeism.

Plastics Industry Safety Challenges

By: Elmer Miller, Onsite Supervisor
Bob Carrier B.S., Safety & Health Consultant
Consultation Education & Training Division

The plastics industry is one of the largest manufacturing industries in the United States, employing 1.5 million people and creating more than $330 billion dollars in annual shipments. The Michigan plastics industry employed nearly 112,000 workers in the year 2000, placing the state third in the nation. Michigan ranked fifth with $22.7 billion in shipments.

Plastics play an indispensable role in a wide variety of markets, including packaging, construction, transportation, automotive components, consumer products, electronic components, adhesives and more.

Plastics Industry Hazards

While the plastics industry is increasingly based on advanced technology, employers still share similar risks of workplace injuries, illnesses and fatalities with other high-hazard industries.

Likely hazards can include exposures to:

- Unguarded or inadequately guarded machinery;
- Unexpected energization of equipment and release of stored energy (lock out/tag out);
- Failure to guard rotating equipment that could cause amputations;
- Hazards associated with improper electrical wiring;
- Falls from lack of guardrails along open-sided floors;
- Fall hazards as a result of inadequate access and work platforms on top of machines.
- Confined spaces and chemical hazards;
- Thermal burns; and
- Slip and trip hazards due to poor housekeeping and improper floor maintenance.

These safety and health hazards pose dangers of electrocution, falls, crushing injuries, being caught in moving machine parts, and asphyxiation. Since 1998 in Michigan, there have been numerous tragic injuries and fatalities in the plastics industry.

Tragic Plastics Accidents in Michigan

- Loose wiring on a grinder caused an employee to be electrocuted.
- A reciprocating part and frame of a molding machine pinned a worker's head, causing a fracture.
- A safety gate was improperly adjusted causing an employee's hand to be amputated.
- While pulling a part out of a mold, a worker's finger was amputated.
- While trying to dislodge a part, the machine cycled and pinned the employee.
- While retrieving a plastic product, an employee's hair was caught in rotating machinery.
- While adjusting a mold, the set-up person's head was crushed by an automated robot.

Complying with MIOSHA rules can help eliminate unsafe conditions and prevent the types of injuries described above. Between 10/1/00 and 9/30/01, the MIOSHA program cited 745 hazards in the plastics industry, with initial penalties of $369,650.

Plastics Top 10 Serious Safety Violations

1. Part 39., Design Safety Standards for Electrical Systems - Guard exposed live parts of electrical equipment operating at 50 volts or more against accidental contact.

2. Part 1., General Provisions - Guard pinch points or otherwise protect employees exposed to contact.

3. Part 2., Floor & Wall Openings, Stairways & Skylights - Guard open-sided floor or platform that is four feet or more above adjacent level with a standard barrier.

4. Part 85., Control of Hazardous Energy Sources (Lockout-Tagout) - Develop, document and use lockout procedures.

5. Part 33., Personal Protective Equipment - Provide face and eye protection.

6. Part 7., Guards for Power Transmission - Guard belts and pulleys seven feet or less above the floor.

7. Part 1., General Provisions - Provide point of operation guard or device.

8. Part 85., Control of Hazardous Energy Sources (Lockout-Tagout) - Provide training to employees authorized to perform lockout.

9. Part 2., Floor & Wall Openings, Stairways & Skylights - Provide appropriate means to gain access to another elevation in excess of 16 inches.

10. Act 154, Section 11(a) - These are violations of the "General Duty Clause" requiring employers to furnish a workplace free of recognized hazards, primarily issued for allowing employees to climb machines and stand on top with no barrier guard or fall protection.

Employers are encouraged to develop a safety and health program to identify and eliminate the specific hazards in their workplace. The basic elements include:

- Management commitment,
- Employee involvement,
- Worksite analysis,
- Hazard prevention and control, and
- Safety and health training.

Recognizing and identifying safety hazards is the first step in developing an effective program. Employee involvement is critical because they are familiar with the operations and risks involved. Hazard assessment provides the basis for developing procedures for each operation. The information below describes some of the common hazards in the plastics industry. Employers are encouraged to obtain copies of MIOSHA standards that apply their workplace.

Amputation and Crushing Hazards

Safeguards must be provided to protect workers from point of operation hazards and pinch points caused by moving parts and equipment. Of special concern in the plastics industry is protection from possible amputation injuries. Equipment that must be evaluated for hazards include: automatic closing doors, fans to cool personnel, feed rolls, rotating equipment such as screw augers, motor couplings and shafts, platen pinch points, ejector plates, conveyors, and portable scrap grinders.

Lockout-Tagout

Equipment and machinery must be locked out when employees are performing servicing or maintenance work in which the unexpected energization or start up of the machines or equipment, or a release of stored energy, could cause injury to employees. This includes changing dies and cleaning of equipment.

The provisions of the lockout-tagout standard apply when any of the following situations exist:

- An employee must either remove or bypass machine guards or other safety devices, resulting in exposure to hazards at the point of operation;
- An employee is required to place any part of his/her body in contact with the point of operation of the machine or piece of equipment; or

Cont. on Page 19

Proper ladders and perimeter barriers are required for access to plastics injection molding machines.

CET GRANTS

$1 Million for Worker Protection

By: Jerry Zimmerman
CET Grant Administrator

On Sept. 18, the Michigan Department of Consumer & Industry Services (CIS) awarded 18 Consultation Education and Training (CET) Grants totaling $1 million to promote workplace safety and health.

"Employers today recognize that one of the most effective ways to increase profits is to provide a safe work environment," said CIS Director **Noelle Clark**. "These grants will provide employers with down-to-earth strategies to protect their workers from injuries and illnesses."

The MIOSHA Consultation Education and Training (CET) Division provides direct staff assistance to employers in a variety of formats. The CET Grant program provides additional options for safety and health education and training to employers and employees.

"One vital area of concern for employers today is preventing ergonomic injuries," said BSR Director **Doug Earle**. "A significant number of these grants will provide effective ergonomics evaluation and training."

The 18 statewide projects include a wide range of training activities and proficiency levels. Many of the grants offer interactive computer-based training modules and may include: text, video, interactive questions, and retention testing.

Most of the grants focus on the performance goals identified in the MIOSHA strategic plan, including: ergonomics training and back safety, construction safety, road builders safety, hearing conservation, hazard recognition and prevention, and training for healthcare and nursing home workers.

Other grants include: workplace violence, Rapid Intervention Team training for firefighters, logging safety, safety and health training for new workers, and safe work practices for agricultural workers.

Seventeen of the projects focus on training programs, while one research grant quantifies and evaluates protections concerning the noise level exposures of employees in the wood products industries.

CET grants are awarded on a competitive basis to management/employer groups, labor/employee organizations, and not-for-profit organizations, such as universities, hospitals and service agencies.

FY 2003 CET Grant Projects

Alpena Community College will provide targeted safety training in three key areas: manufacturing, construction, and health care/long-term care. Additionally it will obtain and share detailed survey data from four key employers that received CET training. This will demonstrate the impact of safety training.

Associated General Contractors will provide an interactive computer-based training program for construction. The program is designed to provide easy access to 14 standardized modules which include: Asbestos Awareness, Confined Space, Electrical Safety, Fall Protection, Hazard Communication, Lockout/Tagout, PPE, Trenching and Shoring, Scaffold Safety, Cadmium Safety, Silica Safety and Lead Safety.

Bay de Noc Community College will provide statewide training and services for the wood harvesting (logging) and the wood using industry with emphasis on sawmills and secondary wood manufacturing. The training program will offer on-site presentations on: awareness of hazards, personal protective equipment, chain saw safety, safe work habits, and sound ergonomic practices.

Center for Workplace Violence Prevention will provide training to small business owners and employees, human resource managers, field personnel in the following areas: personal safety strategies; early warning signs of anger and aggression and early prevention; de-escalation and personal safety strategies; managing high-risk situations; and crisis management.

Eastern Michigan University will provide training for workers whose health and safety is threatened by the possibility of serious back injury due to using improper techniques while moving, transporting or repositioning patients. The training will provide workers with the necessary knowledge, hands-on-training and equipment to perform these necessary functions.

Great Lakes Training Center will provide computer-based health and safety training for construction . Topics will include: basic safety orientation, hazard communication, back safety, ergonomics, scaffolding, electrical safety, etc. The modules contain text, video, interactive questions, and retention testing.

Michigan Aggregates Association will develop a Hearing Conservation and Noise Sampling training program. The program will consist training and technical assistance. The seminars will include: overview of noise rule and compliance issues, hands-on training in using dosimeters and sound level meters, the importance of audiometric testing and the requirements.

Michigan AFL-CIO will provide both generic and customized workplace safety and health training to new employees and incumbent workers affected by new technology and new work processes, equipment or operation. Training topics will include back injuries, lifting techniques, workplace hazards and recognition, right-to-know and hazardous substances.

Dr. Nicole Poirier, a Michigan Chiropractic Council member, conducts a WorkSafe seminar for staff at Pine Ridge Senior Village in Sterling Heights.

Michigan Chiropractic Council facilitators will provide back safety and ergonomics training to workers in nursing home, manufacturing and construction industries. Prior to conducting the training, the facilitators will conduct an on-site evaluation of the workplace. The WorkSafe program is designed to increase employee awareness of ergonomics injuries.

Michigan Farm Bureau will provide training targeted to agricultural employers, managers, service providers and owners. The project will develop and provide realistic hazard identification guidance and minimization practices utilizing computer and DVD formats. Host facilities will be provided with a pre-seminar on-site survey to determine current safe work prac-

Cont. on Page 19

MVPP Strategies for Change

By: Richard Zdeb, Safety Consultant
Consultation Education & Training Division

In today's work environment, the key word is "change." One obvious indication is the prevalence of ISO concepts. ISO certification attests that a company has met or exceeded a series of standards, developed and published by the International Organization for Standardization (ISO), that define, establish and maintain an effective quality system for manufacturing and service industries.

It is a demonstration that the operation has attained a high level of excellence regarding the methods and systems of the business. And yet, at that same high-achieving company, when a call from the receptionist indicates "someone from MIOSHA is here," it is cause for anxiety and concern.

There are more than 850 employers across the nation who do not have that concern. They are participants in the Voluntary Protection Programs (VPP). These employers have outstanding safety and health management systems and are partners with OSHA. In Michigan, there are eight employer sites recognized as the "best of the best" in their safety and health accomplishments.

A common trait of a VPP company is their emphasis on employee involvement. VPP companies have successfully communicated their expectations to their employees. Many companies have empowered employees to develop, implement and maintain required programs. Participation in these work groups, allows for true ownership. Without relinquishing responsibility, management monitors the work group activity.

Recognizing a Need for Change

At the 18th Annual VPPPA Conference this September in Orlando, one national company shared their VPP experiences. Their past incidence rates were well above the industry average, and OSHA compliance was marginal. Knowledge regarding basic OSHA standards was poorly understood. The safety process was disorganized, and an attitude of "it's not my job" was prevalent. Management was disconnected and injuries were considered a cost of doing business.

Traditional approaches at the company weren't working--management recognized their workplace culture had to change. Top executives decided that a proactive safety and health management system would be included as part of the productivity, quality and operations process. A system of safety auditing and resources would be put into place. Safety would be included in the performance system and evaluation.

From that point it became a company goal to establish safety as a value to the organization, reinforcing fundamental OSHA standards, and establishing a vision. The values that were established included:

- Accidents are unacceptable.
- Everyone must work safely.
- Management will lead by example.
- Safety is a shared responsibility.
- Safety is about people.
- Safety is the right thing to do.

Meeting Safety Expectations

After establishing these values, safety and health was incorporated into the business plan. Action plans were developed and implemented. Safety expectations were established and communicated to all employees. Concern for injured employees was clear, with support for return-to-work activities. And follow-up…follow-up…follow-up was done on systemic breakdowns.

Safety accountability was established. Unsafe conditions and acts were addressed swiftly and consistently. Near-miss and accident investigations were conducted immediately and the results communicated to employees and management. With regard to unsafe acts, immediate coaching and counseling was encouraged and given.

The VPPPA 18th Annual Conference in Orlando, Sept. 9-12, offered a unique forum for more than 1,800 employee, management and government leaders to work and learn together to achieve workplace safety and health protection.

This grassroots approach to health and safety resulted in something more than zero tolerance for accidents. It fostered involvement, participation and ownership. The VPP process provided them with the structure to achieve safety and health excellence.

OSHA enforcement no longer was a concern. Work groups were formed to insure that the company was in compliance. OSHA standards became guidelines--not to avoid monetary penalties, but to go beyond the minimum regulatory standards and establish the best possible safety practices.

The company today has several locations across the nation that have achieved VPP status.

Achieving VPP Benefits

Benefits from participating in the VPP program are many. Nationally, VPP sites generally experience from 60 to 80 percent fewer lost workday injuries than would be expected of an "average" site of the same size in their industries. Other benefits include:

- Improved employee motivation to work safely, leading to better quality and productivity.
- Reduced workers' compensation premiums resulting from lower injuries, which can produce a competitive company advantage.
- Opportunity to showcase best safety and health practices in your industry.
- Opportunity to mentor and network with other operations in your industry.
- Recognition in the community as a leader in health and safety.

The VPP program has been in existence for nearly 20 years. MIOSHA has been a participant for seven years. It is a program of partnership and mentoring without the potential of a MIOSHA enforcement inspection. However, an accident investigation, a fatality or an employee complaint would still bring about MIOSHA enforcement participation.

Attaining MVPP Star Status

In Michigan, the MVPP program consists of Star and Rising Star achievement awards. It is administered through the MIOSHA Consultation Education and Training (CET) Division. The Star Award defines the ultimate in health and safety success. In order to attain this Star level, employers must:

- Attain incidence rates below the state average for a period of three years, as determined from their MIOSHA Injury and Illness Log.
- Demonstrate that they have a safety and health management system in place for a minimum of one year.
- Submit a formal application with documentation supporting the key elements of their safety and health management system.
- Agree to a MIOSHA onsite review to verify the information submitted, and to identify the strengths and weaknesses of their system.

For information about the MVPP program, including the MVPP application process, the list of current MVPP sites and commonly asked questions, check the MIOSHA website at: www.michigan.gov/cis. (Select "Workplace Safety and Health.") You can also call the CET Division at 517.322.1809. ■

Clarification on Use of Wheel Chocks

The MIOSHA rule regarding use of wheel chocks has not changed, and Michigan's position remains: The use of wheel chocks provides a greater level of worker protection than air brakes alone.

MIOSHA General Industry Safety Standard Part 21., Powered Industrial Trucks, Rule 2176(1) requires that an employer ensure that a highway truck and trailer shall not be boarded by a powered industrial truck before the highway truck and trailer has its brakes set, and not less than two wheels clocked or restrained by other mechanical means, installed in a manner that will hold the trailer from movement.

The MIOSHA rules requires more than setting the brakes alone. "Other mechanical means" are interpreted by the program to mean one of the available devices which latch onto the Interstate Commerce Commission required bar, or hydraulically move a wedge-shaped block in front of the wheels. Alternatively, some employers have chosen to chain the vehicle to the dock. There may be other similar devices which would be acceptable. Any acceptable device must be used in conjunction with setting of the brakes to comply with the MIOSHA rule.

As a state-run program for occupational safety and health, MIOSHA is subject to its own state enabling legislation, Act 154 of 1974, as amended. The Michigan program is authorized under the provisions of Section 18 of the federal OSH Act of 1970, which provides that states may seek approval to operate its own program provide it is "at least as effective as" the federal OSHA program in promoting safe and healthful working conditions. While state plan programs like MIOSHA must be at least as effective, it does not require the state program requirements be mirror images of the federal program.

Recently there has been some confusion regarding wheel chocking because of federal jurisdictional issues. The reason the federal Occupational Safety and Health Administration's wheel chocking regulation isn't applicable in Michigan is based on Section 4(b)(1) of the federal OSHA legislation (P.L. 91-59); which states, in part, that: **federal OSHA requirements shall not apply to working conditions of employees with respect to which other federal agencies exercise statutory authority to prescribe or enforce standards or regulations affecting occupational safety or health.**

The Michigan occupational safety and health enabling legislation contains no similar provision. Previous decisions on MIOSHA cases have upheld the program's authority to apply MIOSHA requirements in these cases. Nor do other federal laws preempt or otherwise impact the state from inspecting and applying MIOSHA requirements; and that comity should not be regarded as applicable in this case.

Therefore, while Michigan may look to federal directives on the issue of wheel clocking for guidance and /or information on how rules may be interpreted or applied, the program is not bound to adopt the federal OSHA approach.

For information, contact the General Industry Safety Division at 517.322.1831.

Steel Erection Standard

Part 26

Effective September 18, 2002

MIOSHA will delay applying the new provisions covering design and fabrication of components.

The new MIOSHA steel erection standard became effective for covered Michigan employers and employees on September 18, 2002. This standard has adopted language from the recently effective federal Subpart R and provides many enhanced protections for Michigan workers.

Several of the new provisions of the revised standard affect the design of structural components which are typically fabricated two to three months prior to being erected.

Re-fabricating components that are already in the design/fabrication process would be very costly, cause serious construction delays, and affect the building trades workers involved. To facilitate the transition to the revised standard, enforcement of the component fabrication requirements will be delayed to accommodate a phase-in by the industry in Michigan.

Therefore, MIOSHA will delay applying the new provisions listed below covering design and fabrication of components affected by the revised steel erection standard until January 1, 2003.

In addition, if a building permit was issued prior to September 18, 2002, or if steel erection commenced prior to September 18, 2002, the component requirements of the standard will not apply to the project. Employers who intend to rely on these dates must provide at the job site documentation to support any assertion that the provisions would not apply.

This delay will allow sufficient time to implement design changes into the structural members of all size projects. Employers are urged, however, to implement the design and fabrication requirements at the earliest date possible.

Part 26 Rules Affected by the Implementation Delay

R408.42616(1)	Installation of shear connectors
R408.42626(1)(2)	Columns anchored by 4 anchor bolts
R408.42628(4)(5)	Column splices and perimeter cables
R408.42629(1)	Double connections
R408.42634(1)(a)	Open web joists stabilizer plate
(3)	Joists 60 feet or less in length capable of supporting one employee
(8)(a)	Field bolting joists
R408.42643 (2)(5)	Anchorage and girt and eave strut to frame connections

All standards can be obtained on line at www.michigan.gov/cis. (Select "Safety and Health" from the left navigation bar.) ■

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.

Craig Spoelhof, Plant Manager; Mike Everett, CET Supervisor; Elaine Hoover, Safety Engineer; and Paul Geldaker, Production Manager.

Johnson Controls Meadowbrook Plant - Holland

Johnson Controls' Meadowbrook plant received the **CET Silver Award** for an outstanding safety and health record on July 3rd. The CET Silver Award recognizes one year without a lost time accident.

CET Supervisor **Mike Everett** and CET Consultant **Dave Nelson** presented the award to **Craig Spoelhof**, Plant Manager; **Elaine Hoover**, Safety Engineer; and **Paul Geldaker**, Production Manager.

The Meadowbrook facility in Holland employs 400 workers and manufactures overhead consoles for cars, trucks, SUVs, vans, etc. The overhead consoles consist of many options, including: onstar, compass with trip odometer, and homelink options. They have the technology to build and offer a DVD player with screen and headphone attachments, for a quiet ride with the kids.

Johnson Controls, Inc. is a global leader in automotive systems and facility management and control. In the automotive market, it is a major supplier of seating and interior systems, and batteries. For non-residential facilities, Johnson Controls provides building control systems and services, energy management and integrated facility management. Johnson Controls, headquartered in Milwaukee, had sales for 2001 of $18 billion.

Rohm and Haas Company - Manistee Plant

On July 11th, Rohm and Haas Company's Inorganic and Specialty Solutions (ISS) Division in Manistee received the **Ergonomic Innovation Award**, which is issued to employers for innovative ideas that have been implemented to reduce worker strain.

BSR Director **Doug Earle** and CET Consultant **Jerry Medler** presented the award to Plant Manager **Bob Stewart**, Environmental Health & Safety Manager **Donald Kuk**, and the Safety and Health Committee members involved in their ergonomic project.

The ISS Division makes specialized magnesia products for the pharmaceutical, food, plastics and rubber markets. Under the leadership of EHS Manager Donald Kuk, the company conducted a full-scale study of lifting and palletizing 50-pound bags, because of the high potential for back injury. The goals of the project were to find improvements toreduce the potential for injury. Rohm and Haas Company will use the study in other company facilities with similar work environment, to help reduce ergonomic injuries.

Rohm and Haas Company is one of the world's largest specialty chemical companies, with annual sales of $5.7 billion, and more than 100 research and manufacturing facilities in 25 countries.

Ignac Jakovac, Rand Haas ISS GM; Jerry Medler, CET Consultant; Ayalew Kanno, CET Dep. Chief; Doug Earle, BSR Director; Rob Heck, PACE Safety Rep.; Don Kuk, EHS Mgr., Rohm and Haas; Jerome Thebault, PACE Safety Rep.; Barry Crawford, Mnfg. Mgr., Rohm and Haas; Bob Stewart, Manistee Plant Mgr.

Bernard Sznaider, CET Consultant; Roger Paige, Safety Mgr., Focus: HOPE; Dr. Kalmin Smith, CIS Dep. Director; Linda Hanks, Manager, ITC; and Eleanor Josaitis, Ex. Director, Focus: HOPE.

Focus: HOPE Information Technologies Center

On July 17, Focus: HOPE Information Technologies Center (ITC) received the **CET Silver Award**, which recognizes one year without a lost-time accident. ITC's 28 employees attended the presentation of the award by CIS Deputy Director **Kalmin Smith** and CET Consultant **Bernard Sznaider.**

"We applaud your outstanding efforts to maintain an accident-free environment, by teaching your students the benefits of workplace safety," said Smith.

Focus: HOPE started the ITC in 1999, which trains students for entry-level positions in the Information Technology industry. Their curriculum was developed by industry leaders, such as Microsoft, Cisco and Novell. They are partners in the Cisco Network Academy Program, Comp TIA, BICSI and Novell Education Academic Partners.

Safety for their customers, colleagues and themselves is an important part of an IT professional's performance. The ITC program has found that diligence in maintaining a safe environment is the best method to teach their students about safety.

Focus: HOPE, a nationally recognized civil rights organization , was co-founded in 1968 by **Father William Cunningham** (1930-1997) and Ex. Dir. **Eleanor Josaitis.**

Education & Training Calendar

Date	Course Location	MIOSHA Trainer Contact	Phone
November			
19	Ergonomics: A Practical Approach Ann Arbor	Suellen Cook Ray Grabel	734.677.5259
19 & 20	2-Day Mechanical Power Press Clarkston	Richard Zdeb Peggy Desrosier	248.625.5611
December			
3	Recordkeeping & Workers' Compensation Strategies Ann Arbor	Suellen Cook Ray Grabel	734.677.5259
4	Powered Industrial Truck Train-the-Trainer Battle Creek	Micshall Patrick Safety Council West-MI	616.344.6189
4	Elements of a Safety & Health Program Saginaw	Richard Zdeb Dan Matthews	888.238.4478
4	Machine Guarding for Manufacturing Marquette	Dan Maki Lake Superior Partnership	906.226.6591
4 & 5	MIOSHA 10-Hour Construction Course Traverse City	Tom Swindlehurst Pete Anderson	517.371.1550
5	Overview of Revised Part 74 Fire Fighters Kalamazoo	Micshall Patrick Safety Council West-MI	616.344.6189
10	Safety Solutions for Nursing Homes & Long Term Care Facilities Southfield	Jennifer Clark-Denson Ed Ratzenberger	248.557.7010
12	Supervisors' Role In Safety & Health Clarkston	Richard Zdeb Peggy Desrosier	248.625.5611
12 & 13	MIOSHA 10-Hour Construction Course Alpena	Tom Swindlehurst Pete Anderson	517.371.1550
17 & 18	MIOSHA 10-Hour Construction Course Houghton	Tom Swindlehurst Pete Anderson	517.371.1550
January			
14	Recordkeeping, Accident Investigation & Work-Comp Strategies Belleville	Suellen Cook Janet Millard	734.697.7151
15	Safety & Health Seminar for Grocery, Retail & Warehousing Clarkston	Richard Zdeb Peggy Desrosier	248.620.2534
29 & 30	MIOSHA 10-Hour Construction Course Marquette	Tom Swindlehurst Pete Anderson	517.371.1550
February			
3	Supervisors' Role In Safety & Health Southfield	Richard Zdeb Pat Murphy	248.353.4500
4 & 5	MIOSHA 10-Hour Construction Course Muskegon	Deb Johnson Pete Anderson	517.371.1550
6	When MIOSHA Visits Saginaw	Lee Jay Kueppers Dan Matthews	888.238.4478
11	MIOSHA Part 18: Overhead Cranes Workshop Ann Arbor	Suellen Cook Ray Grabel	734.677.5259
11 & 12	MIOSHA 10-Hour Construction Course Flint	Tom Swindlehurst Pete Anderson	517.371.1550
18 & 19	MIOSHA 10-Hour Construction Course Jackson	Deb Johnson Pete Anderson	517.371.1550

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.cis.state.mi.us/bsr/divisions/cet/cet_cal.htm.

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Mr. Carl Davis**
Mr. Daniel Corbat
Mr. Andrew Lang
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Mr. Douglas Williams

Public Member

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Chair** ***Vice Chair

Standards Update

New Hearing Loss Recording Rules

Beginning January 1, 2003, the criteria stated in MIOSHA Part 11., Recording and Reporting of Occupational Injuries and Illnesses, will change regarding when employers are required to record work-related hearing loss cases if an employee's hearing test shows a marked decrease in overall hearing.

Currently, Part 11. requires employee hearing loss to be recorded if a standard threshold shift (STS) is detected after performing an employee's annual hearing test (audiogram). An STS is defined in the occupational health standard Part 380., Noise Exposure, as a change in the hearing threshold relative to the baseline audiogram of an average of 10 decibels(dB) or more at the following tones, 2000, 3000, and 4000 Hertz (Hz), in either ear. Decibels is a measure of how loud a sound is. Hertz is a measurement of the frequency or pitch of a sound such as a low musical note or a high musical note.

This definition of an STS will not change. But starting January 1, 2003, Part 11. will include an additional recording criteria. The STS will be recordable if the hearing loss is at least 25 dB above audiometric zero, averaged over the three tone frequencies of 2000, 3000, and 4000 Hz. No change will occur in how to record work-related hearing loss on the MIOSHA Log 300 . As currently required, work-related hearing loss should be recorded in section (M), column 5 "All other illnesses."

No change will occur regarding worker protection. MIOSHA's occupational noise standard, Part 380., requires employers in general industry to conduct periodic audiometric testing of employees when employees' noise exposures are equal to, or exceed, an 8-hour time-weighted average of 85dBA. Under these provisions, if such testing reveals that an employee has sustained a hearing loss equal to an STS, the employer must take protective measures, including requiring the use of hearing protectors, to prevent further hearing loss.

Also, employers can make adjustments for hearing loss caused by aging, seek the advice of a physician or licensed health care professional to determine if the loss is work-related, and perform additional hearing tests to verify the persistence of the hearing loss.

Hearing loss can result in a serious disability and put employees at risk of being injured on the job. MIOSHA's Five Year Strategic Plan reflects this concern by including a performance goal to reduce the number of employees harmed due to work-related hearing loss.

For questions on the recording of hearing loss, contact the MIOSHA Information Division at 517.322.1851.

Effective September 18, 2002

Steel Erection Standard
Part 26.

A New Standard for the Construction Industry

Please note: MIOSHA will delay applying the new provisions covering design and fabrication of components. Please see article on Page 11 for details.

All standards can be obtained on line at www.michigan.gov/cis. (Select "Safety and Health" from the left navigation bar.)

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

Status of Michigan Standards Promulgation

(As of October 4, 2002)

Occupational Safety Standards

General Industry

Part 08.	Portable Fire Extinguishers	Approved by Commission for review
Part 18.	Overhead and Gantry Cranes	Final, effective 4/10/02
Part 19.	Crawler, Locomotives, Truck Cranes	At Advisory Committee
Part 20.	Underhung and Monorail Cranes	Approved by Commission for review
Part 58.	Vehicle Mounted Elevating & Rotating Platforms	Approved by Commission for review

Construction

Part 01.	General Rules (Consolidating with health rules)	Final, effective 8/9/02
Part 07.	Welding & Cutting	Approved by Commission for review
Part 08.	Handling & Storage of Materials	Approved by Commission for review
Part 12.	Scaffolds	Approved by Commission for review
Part 14.	Tunnels, Shafts, Cofferdams & Caissons	Draft to Advisory Committee for review
Part 16.	Power Transmission	Approved by Commission for review
Part 18.	Fire Protection & Prevention	Final, effective 9/18/02
Part 25.	Concrete Construction	Approved by Commission for review
Part 26.	Steel and Precast Erection	Final, effective 9/18/02
Part 30.	Telecommunications	Approved by Commission for review
Ad Hoc	Communication Tower Erection	Approved by Commission for review

Occupational Health Standards

General Industry

Carcinogens R 2301-2302	Final, effective 9/27/02
Grinding, Polishing & Buffing	RFR approved
Non-ionizing Radiation R 2420	Final, effective 8/1/02
Powered Industrial Trucks R 3225 (OH Rules only)	Rescinded due to duplication
Respirators in Dangerous Atmoshperes (OH Rules only)	Rescinded due to replacement
Sanding Machines R 3230 (OH Rule only)	Rescinded due to duplication
Ventilation for Certain Hazardous Locations R 3110	Rescinded due to duplication

Construction

Air Contaminates R 6201 (Gases, Vapors, etc.)	Final, effective 1/23/02
General Workplace Requirements R 6601	Rescinded due to duplication
Sanitation for Construction R 6615	Consolidated with CS Part 1
Illumination for Construction R 6605	Consolidated with CS Part 1

Administrative Rules

Part 11. Recording and Reporting of Occupational Injuries and Illnesses	Formal rules submitted

The MIOSHA Standards Division assists in the promulgation of Michigan occupational safety and health standards. To receive a copy of the MIOSHA Standards Index (updated September 2002) or for single copies and sets of safety and health standards, please contact the Standards Division at 517.322.1845.

RFR	Request for Rulemaking
ORR	Office of Regulatory Reform
LSB	Legislative Services Bureau
JCAR	Joint Committee on Administrative Rules

Variances

Published October 30, 2002

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

Variances Requested Construction

Part and rule number from which variance is requested
Part 8 - Material Handling: Rule R408.40833. Rule 833 (1)
Summary of employer's request for variance
To allow employer5 to tandem lift structural steel members under controlled conditions and with stipulations.
Name and address of employer
American Erectors, Inc.
Location for which variance is requested
Southgate Recreation Center, Southgate
Clarkston Medical Building, Clarkston
Hutchings Elementary School, Howell
Name and address of employer
Assemblers, Inc.
Location for which variance is requested
South State Commons Building, Ann Arbor
Name and address of employer
Douglas Steel Erection Company
Location for which variance is requested
Holocaust Memorial Center, Farmington Hills
Delta Township, Lansing
Michigan State University, East Lansing
St. Joseph Mercy of Macomb-W. Campus, Clinton Twsp.
Name and address of employer
General Steel Erectors Inc.
Location for which variance is requested
St. Joe Hospital, Pontiac
Name and address of employer
McGuire Steel Erection Inc.
Location for which variance is requested
Performing Arts High School, Detroit
Oakwood Annapolis Hospital Surgery Expansion, Wayne
Name and address of employer
Whitmore Steel
Location for which variance is requested
Ford Motor Company Rouge Plant, Dearborn

Part and rule number from which variance is requested
Part 10 - Lifting and Digging Equipment: Rule R408.41015a (2) (d)(g) (3) (4)
Summary of employer's request for variance
To allow the use of a work platform mounted on the boom of a Krupp Crane & Tadano Crane for unscheduled emergency power outage restoration work, provided all of the requirements listed are met.
Name and address of employer
Lansing Board of Water and Light
Location for which variance is requested
As reported in Item #1 in Terms of Interim Order
Name and address of employer
Hi-Ball Co Inc.
Location for which variance is requested
As reported in Item #1 in Terms of Interim Order

Part and rule number from which variance is requested
Part 13 - Mobile Equipment: Ref. #1926.1000 (a) (1&2) (b)
Summary of employer's request for variance
To allow the employer to work under overhead conveyor obstructions in an assembly plant to dig shallow foundation pad excavations without the use of rollover equipment providing certain stipulations are adhered to.
Name and address of employer
Kent Concrete Construction
Location for which variance is requested
Western Michigan University, Kalamazoo
Name and address of employer
Mead Brothers Exc Inc.
Location for which variance is requested
Western Michigan University, Kalamazoo

Part and rule number from which variance is requested
Part 32 - Aerial Lift Platforms: Rule R408.43209, Rule 3209 (8) (c)
Summary of employer's request for variance
To allow employer to firmly secure a scaffold plank to the top of the intermediate rail of the guardrail system of an aerial lift for limited use as a work platform.
Name and address of employer
Motor City Electric Co.
Location for which variance is requested
General Motors Renaissance Center, Detroit

Variances Granted Construction

Part and rule number from which variance is requested
Part 8 - Material Handling: Rule R408.40833, Rule 833(1)
Summary of employer's request for variance
To allow employer to tandem lift structural steel members under controlled conditions and with stipulations.
Name and address of employer
American Erectors, Inc.
Location for which variance is requested
Anchor Bay High School, Fairhaven
Martin Street Condos, Birmingham
Name and address of employer
Azco Inc.
Location for which variance is requested
Grand Rapids Convention Center, Grand Rapids
Name and address of employer
Douglas Steel Erection Company
Location for which variance is requested
General Motors Corp. Metal Fabrication Div., Flint
Name and address of employer
McGuire Steel Erection Inc.
Location for which variance is requested
Crittenton Hospital Medical Center, Rochester
New Public Works Complex, Battle Creek
Downtown Center, Ann Arbor
Children's Center of Wayne County, Detroit
Name and address of employer
Sova Steel Inc.
Location for which variance is requested
Shelby Creek Commercial Development, Shelby Twp.
Name and address of employer
Tri-Steel Inc.
Location for which variance is requested
Saginaw Valley State University, Saginaw
Name and address of employer
Whaley Steel Corp.
Location for which variance is requested
Kettering High School, Waterford
Mott High School, Waterford
Name and address of employer
Whitmore Steel
Location for which variance is requested
Cherry Capital Airport, Traverse City
Howell Parking Deck, Howell

Part and rule number from which variance is requested
Part 10 - Lifting & Digging Equipment: Rule R408.41018, Rule 1018a(21)
Summary of employer's request for variance
To allow the employer to utilize rotation resistant cable to raise and lower work platform provided stipulations are adhered to.
Name and address of employer
Chicago Bridge & Iron Company
Location for which variance is requested
Various sites in Michigan to be reported as stated in Item # 1 in Terms of Temporary Variance

Part and rule number from which variance is requested
Part 12 - Scaffolds and Scaffold Platforms: Rule R408.41121, Rule 1221(1)(c)
Summary of employer's request for variance
To allow employer to use stilts at a maximum height of 24 inches under controlled conditions and according to certain stipulations.
Name and address of employer
Ritsema Associates
Location for which variance is requested
FIA Project, Allegan

Part and rule number from which variance is requested
Part 32 - Aerial Lift Platforms: Rule R408.43209, Rule 3209 (8)
Summary of employer's request for variance
To allow employer to firmly secure a scaffold plank to the top of the intermediate rail of the guardrail system of an aerial lift for limited use as a work platform, provided certain stipulations are adhered to.
Name and address of employer
Electrol Corp.
Location for which variance is requested
General Motors Corp. Warren Tech Center, Warren
Name and address of employer
William E. Harnish Acoustical, Inc.
Location for which variance is requested
General Motors Tech Center, Warren
Name and address of employer
Pontiac Ceiling & Partition Co., LLC
Location for which variance is requested
Anchor Bay High School, New Baltimore

Variances Revoked General Industry

Part and rule number from which variance was granted
Part 3, Fixed Ladders Rule 335(3)
Summary of variance
Allows the use of 3 fixed ladders in the storage silos with a minimum clearance of 6" between the center line of the rungs on the back side to the nearest permanent object.
Name and address of employer
Lietzke Farms, Inc., DeWitt
Location for which variance was granted
Same
Reason for revocation
Unable to locate employer

Part and rule number from which variance was granted
Part 1, General Rules Rule 33(3)
Summary of variance
Allows for an alternative to required concurrent machine controls for operation of all guillotine rubber cutters.
Name and address of employer
Goodyear Tire & Rubber Co., Jackson
Location for which variance was granted
Same
Reason for revocation
Facility is closed.

Part and rule number from which variance was granted
Part 2, Floor & Wall Openings, Stairways & Skylights Rule 215(2)
Summary of variance
Alternate means of guarding pit or vat areas.
Name and address of employer
Bay View Orchards, Omena
Location for which variance was granted
Between Omena and Northport on M-22
Reason for revocation
Unable to locate employer

Part and rule number from which variance was granted
Part 23, Power Presses Rule 2365
Summary of variance
Alternate methods the Department will accept in lieu of guide pin enclosures on power presses at this location.
Name and address of employer
C & F Stamping Company, Inc., Kentwood
Location for which variance was granted
Same
Reason for revocation
Unable to locate employer

Part and rule number from which variance was granted
Part 24, Mechanical Power Presses Rule 2431(1)
Summary of variance
Variance applies to presses in Department #2 and allows for alternate methods in lieu of a single stroke mechanism required for presses using full revolution clutches.
Name and address of employer
Chesley Industries Inc., Farmington
Location for which variance was granted
Same
Reason for revocation
Unable to locate employer

Part and rule number from which variance was granted
Part 11, Polishing, Buffing and Abrading Rule 1115(1)
Summary of variance
Allows for alternate means of guarding the polishing and buffing jacks.
Name and address of employer
Comet Corporation, Detroit
Location for which variance was granted
Same
Reason for revocation
Unable to locate employer

Part and rule number from which variance was granted
Part 6, Fire Exits Rule 695(3)
Summary of variance
Allows the installation of a fixed ladder in lieu of exterior stairs or basket ladder type fire escape from the roof of the working house to ground level.
Name and address of employer
Croswell Milling Company, Croswell
Location for which variance was granted
Same
Reason for revocation
Unable to locate employer ■

BSR Year 2002 Award Winners

The Bureau of Safety & Regulation is pleased to announce Year 2002 special employee recognition awards. Several of the awards are named after former exemplary employees.

Herbert C. Austin Director's Discretionary Award

Recipient: Martha Yoder, Chief, General Industry Safety Division

As Chief, Martha has worked to protect and enhance the division's reputation as one of the pre-eminent compliance organizations in the nation. With 18 years of service, she provides consistent direction to her employees and assumes a leadership role in the bureau.

Galeeta Galusha-Antes "Excellence in Service!" Award

Recipient: Bea Nielsen, Secretary, General Industry Safety Division

Bea is retiring with 23 years of service to the bureau. She developed a spreadsheet that tracks the location and stage of all active and closed inspection files, which eliminated two other tracking systems. She has consistently performed above her class.

Allan W. Harvie Meritorious Service Award

Recipient: Ayalew Kanno, Deputy Chief, CET Division

Ayalew has dedicated more than 20 years of service to the bureau. He is an excellent leader who expects the best from those he works with. He is considered by all those who know him as a man of dignity and integrity.

William H. Sebring Meritorious Service Award

Recipient: Tony Allam, Supervisor, Construction Safety Division

Tony is an excellent supervisor and has accepted many division projects and assisted other division on construction outreach. Tony has 18 years of service with the bureau, and was instrumental in the development of MIOSHA's first experimental variance.

Bernie Bloomfield Meritorious Service Award

Recipient: Elaine Clapp, Industrial Hygienist, Occupational Health Division

Elaine has eight years with OHD and is the division's industrial hygienist metals specialist. Elaine won this award by a vote of her peers for her integrity and quality field work and for exemplifying all of the best qualities of an industrial hygienist.

BSR 2002 Award Winners: Bea Nielsen, Secretary, General Industry Safety Division; Ayalew Kanno, Deputy Chief, Consultation Education & Training Division; Martha Yoder, Chief, General Industry Safety Division; and Tony Allam, Supervisor, Construction Safety Division. (Not pictured: Elaine Clapp, Industrial Hygienist, Occupational Health Division.)

Roadway Work Zones

Cont. from Page 1

safety in the work zones. Engineers like Tanya contributed greatly to the science of traffic regulation. Most work zones are very well designed, properly equipped, and well set up.

Contractors, utilities, government agencies, and others working in the road right-of-way still must remain diligent to ensure the work zones are correctly set up and maintained. Part of the problem is that some work zones are not established and adequately maintained according to specifications. That part of the problem, however, can be controllable.

An Uncontrollable Element?

Traffic control devices, however, are not the only factor in work zone safety. It is important that drivers are alert, heed the warning signs, follow the channelization devices, and proceed through the area affected by the construction with all due caution. Indeed, the Michigan Road Builder's Association (MRBA) perceives drivers as the only uncontrollable element in work zone safety.

In an effort to affect that uncontrollable element, Governor Engler signed a bill last year known as "**Andy's Law**" that imposes severe penalties including prison time for persons found guilty of killing or injuring a road worker. **Michael Eckert**, Director of Safety Services for MRBA commented, "Andy's Law was designed to direct driver's attention to the problem with the hope that the law would never have to be used. The most important issue is to get the drivers to pay attention and obey the posted signs."

We All Owe It

Every spring, as the roadwork season approaches, the message goes out to raise awareness among the motoring public about the dangers to workers and motorists alike in roadway work zones. Many years are like this year and a worker is killed by the very traffic flow that they are risking their life to improve. Just last year, on Oct. 1, 2001, while directing traffic **Eva Simbler** was struck and killed by a car in Kent county. Ironically, Andy's Law became effective that very day.

Next year and every spring as the season's road work projects begin, road workers will labor to make our roads better and safer in the eerie din of the constant traffic noise. They will be unnerved by the rush of traffic just a few feet from their work area. They may still not be able to hear the breeze blowing or rest easily while performing their dangerous work, but each person deserves to end their work shift in the same healthy condition they were in when they began. Every employer who has workers in a roadway work zone and all of us who drive owe this to Tanya. We owe it to Eva. We owe it to Bill. ■

Tanya Maria Loewen

International Road Dynamics, the company that employed Tanya Loewen, announced a scholarship fund in her memory. Contributions to the fund can be addressed to the Tanya Loewen Memorial Scholarship, c/o International Road Dynamics, 702 43rd St. East, Saskatoon, Saskatchewan, Canada, S7K3T9. More information is available at www.irdinc.com.

Video Loan Service

The Consultation Education and Training (CET) Division provides safety and health training videos through a vendor loan service. There are no user fees for the videos borrowed; however, the borrower is responsible pay the return postage through an express package service. A full range of safety and health videos are available. Among the many topics covered are: Accident Causes & Prevention; Accident Investigation; Bloodborne Pathogens; Confined Space; Construction; Ergonomics; Fire Safety; Hazard Communication; Respiratory Safety; and Welding.

Employers are encouraged to take advantage of this free service to help promote safety and health in the workplace. Make your request for safety and health videos to:

Impressions Inc.
252 North 20th Street
Battle Creek, MI 49015
616.288.4501

Questions regarding this service may be directed to the CET Division at 517.322.1809.

Minor Tool Changes

Cont. from Page 5

performing the tasks must be considered. Finally, consider the overall conditions of the work environment.

Evaluate Risk: Use the information gathered from the above identification and assessment activities to evaluate each identified hazard and task. From the review, determine the level of risk.

Alternative Measures

Once the level of risk has been determined, it is possible to explore whether there are adequate alternative measures available. Alternative measures include all of the following, and employers are expected to select the highest level of feasible control(s).

- Eliminate the hazards through design.
- Use full lockout.
- Use engineered safeguards and techniques such as: area scanners, guards, light curtains, pressure mats, presence sensing devices, or stop devices under exclusive control of the operator.
- Use warning and alerting devices to include audible, visual devices, or barricades.
- Use administrative controls such as: work procedures, practices, and training.
- Use personal protective equipment as appropriate to the hazard.

In many cases, application of any single control measure is not adequate to provide an effective level of protection for employees. In these cases, it is necessary to use a combination of measures.

Appropriate Implementation

The General Industry Safety Division is seeing an increase in the number of employers who have taken the time to thoroughly evaluate the risk of a minor tool adjustment or change or minor serving activity, and are implementing appropriate alternative protective measures.

Some of the examples safety officers have seen involve combinations of procedures requiring a number of steps to restart a machine, redundant interlocks, reduction of machine power to a level where it will not cycle, and taking steps to prevent motion through blocking.

Each circumstance where alternative measures are used are evaluated by safety officers to determine whether the work activity meets the parameters of the exception in the standard; whether the alternative measures provide adequate protection; whether employees are properly trained in the alternative measures, when the measure may be use, and when full lockout is required; and whether the employer is providing adequate monitoring to ensure compliance by staff performing the work.

Remember that the ultimate goal, whether using lockout or alternative measures, is to take the steps necessary to ensure that employees are safe during the work activity. ■

Plastics Industry

Cont. from Page 8

■ An employee is required to place any part of his/her body into a danger zone associated with a machine operating cycle.

Personal Protective Equipment (PPE)

Employers must assess hazards in the workplace to determine what PPE is needed. Proper PPE is necessary to protect workers face and/or hands from the heat of the molds. Purging activities pose the potential of severe burns to operators and set-up personnel. Burns also occur to personnel when they come into contact with the heated portions of the barrels.

To protect against thermal hazards, heat resistant PPE is required when guards are not provided on the heated surfaces of the machine. Hand trimming operations can present the risk of cuts, and cut resistant gloves should be provided.

Fall Prevention

Employees who fill resin bins located on the tops of machines or have other needs to access the top must be provided with an appropriate means of access. Employees must not be allowed to climb up the side of the machine. Appropriate work surfaces must also be provided. Standard barriers are required around work platforms or fall protection must be provided.

Electrical Hazards

All electrical cords should be maintained free of defects and should not be allowed to create electrical hazards or trip hazards. The cords of grinders that are moved manually between stations may become damaged due to minor abrasions.

Electrical connections to heated portions of a ram or screw cylinder must be covered with a nonconducting guard or a grounded metal barrier to prevent contact with live terminals. Personal fans should be grounded properly and cords should not be frayed or spliced.

Mold Transfer and Handling

It is critical that moving slings and eyebolts are in good condition. No bent eyebolts should be used. Eyebolts should be fully engaged in molds to the shoulder of the bolt. No spacers are allowed between shoulder of bolt and the mold. Welding on eyebolts will destroy the integrity of the forged eyebolt. It is important that slings, eyebolts, and material handling devices be inspected for defects frequently.

Housekeeping

Poor housekeeping can lead to debilitating back injuries as a result of slips or falls. The over loading and filling of hoppers and grinder bins with granular material contributes to unsafe conditions.

No oil, fluid, water or plastic pellets or granules should be allowed to collect on the floor, work platforms, or any other work surfaces. All work platforms and steps should be of open design or slip resistant surface. No air, hydraulic or water lines should be allowed to create a slip or trip hazard.

Preventive Maintenance

Continuous preventive maintenance is a critical element in the prevention of unsafe conditions. Hydraulic and coolant hoses have a safety factor rating of four, which will meet and exceed high temperature and pressure ratings. Scheduled routine repair of these hoses will help eliminate the potential for accidents.

Ergonomics

Employers are encouraged to conduct an assessment to identify jobs or work conditions that may cause undue strain, localized fatigue, discomfort or pain. Job tasks that involve activities such as repetitive and forceful exertions; frequent heavy or overhead lifts; awkward work positions or use of vibrating equipment should be evaluated for possible ergonomic problems.

It is recommended engineering controls be used when possible to reduce or eliminate these types of hazards. Ergonomically designed hand tools, work stations, material lifting devices can help eliminate hazards. Designing work areas that do not require employees to work in awkward positions, use repetitive movements or forceful exertions can reduce the risk of cummulative trauma and musculoskeletal disorders.

Partnership with MIOSHA

On May 25, 2000, MIOSHA signed a landmark partnership with The Society of the Plastics Industry, Inc. (SPI). The purpose of the formal partnership is to focus on the importance of providing a safe workplace for all workers in the plastics processing industry in Michigan. SPI is the 1,700 member trade association representing the plastics industry in the U.S.

The formal partnering charter establishes a relationship in which the parties will: promote worker safety; conduct stakeholder meetings to discuss pertinent and/or urgent issues; cooperate in the development and improvement of plastics processing training programs; and foster a climate in which workplace safety is promoted as a good business practice.

As a result of this partnership, the plastics industry has been added as an "Initiative" to the MIOSHA Strategic Plan. As part of the initiative, the Consultation Education and Training (CET) Division is providing outreach information and guidance specific to the plastics industry to help them protect employees.

Part 62., Plastic Molding, Rule 6211 requires that an employer shall provide training to all employees regarding the operating procedures, hazards and safeguards of any assigned job. Safety and health training is an integral component of skill training for plastic mold operators. It is important that safety training be viewed as a function of the job and not as an extra responsibility.

For information on MIOSHA education and training services, please contact the CET Division at: 517.322.1809. ■

CET Grants

Cont. from Page 9

tices and possible hazards.

Michigan Health and Hospital Association will continue to implement an ergonomics prevention program tailored to nursing and personal care facilities. The project which will focus on back injury, and will also address shoulder strain, carpal tunnel syndrome, pinched nerves, etc. On-site ergonomic evaluations will be provided along with the staff training.

Michigan Road Builders Association will provide interactive style presentations, workshops and courses for contractors, management, supervisory and line workers. The training will include Heavy/Highway Contractor Update, "Safety Day" Presentations, Excavation; Trenching; and Shoring and Technical Assistance.

Michigan State University/Labor Program Service will provide train-the-trainer courses in Rapid Intervention Team (RIT) training. These trained personnel then go back to their fire departments and train their employees. The training will be directed to firefighters, officers, and fire chiefs because all fire service personnel have RIT responsibilities.

North Central Michigan College will provide safety and health training to employers and employees in seven remote counties served by North Central Michigan College. They will design, develop and deliver targeted safety training for nursing and personal care facilities, building construction and plastic industries.

PASSES will work with Michigan Construction Teachers Association and other construction trade schools, to provide training for construction technical students in the classroom. They will also develop a web-based training program using the PASSES Edge curriculum and offer it to tech schools.

Safety Council for West Michigan will provide training programs to nursing homes and long-term care facilities on: lifting safety, lifting equipment, bloodborne pathogens, dealing with aggressive behavior, and personal protective equipment. They will offer technical assistance in developing a written safety and health program.

Wayne State University will establish and implement a twelve-month safety training program using the CD ROM based Safe2 Work training package. The courses are interactive, self-paced curricula that allow the worker to work and be tested using a simulation of the environment they are studying.

Research Profect

Bay de Noc Community College will measure and quantify the average noise level exposure of employees in the wood products industry. The data will be used to: establish more accurate industry standards for hearing protection; assist in the creation of more comprehensive hearing conservation programs; and increase worker awareness of noise level hazards. ■

How To Contact MIOSHA

MIOSHA Complaint Hotline	800.866.4674
Fatality/Catastrophe Hotline	800.858.0397
General Information	517.322.1814
Free Safety/Health Consultation	517.322.1809

Director	517.322.1814	Doug Earle
Deputy Director	517.322.1817	Deborah Grether
Deputy Director	517.322.1817	Doug Kalinowski

DIVISION	PHONE	CHIEF
Appeals	517.322.1297	Diane Phelps
Construction Safety	517.322.1856	Richard Mee
Consultation Education & Training	517.322.1809	Maryann Markham
Employee Discrimination	248.888.8777	Jim Brogan
General Industry Safety	517.322.1831	Martha Yoder
Information	517.322.1851	Ron Morris
Occupational Health	517.322.1608	John Peck
Standards	517.322.1845	Connie Munschy

Website: www.michigan.gov
(Select "Workplace Safety & Health" from the left navigation bar.)

If you would like to subscribe to the MIOSHA News, please contact us at 517.322.1809 and provide us with your mailing address. 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.

MI SHA news

Consumer & Industry Services
Bureau of Safety & Regulation
Director: Douglas R. Earle

MIOSHA News is a quarterly publication of the Bureau of Safety & Regulation, which is responsible for the enforcement of the Michigan Occupational Safety and Health Act (MIOSHA).

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.

Printed under authority of the Michigan Occupational Safety and Health Act, PA 154 of 1974, as amended. Paid for with the state "Safety Education and Training Fund" and federal OSHA funds.

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Consumer & Industry Services
Director: Noelle A. Clark

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Consumer and Industry Services

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(20,000 copies printed at a cost of $9,510 or $0.48 per copy.)