Ever considered partnering with MIOSHA? From significant reductions in workplace deaths, injuries and illnesses – to more active employee involvement – to receiving consultative services – there’s plenty of reasons to form a MIOSHA partnership. But don’t just take our word for it. Learn what some of our partners have gained from entering into a cooperative relationship with the agency and their advice for companies looking to form their first partnership.

For Jason Anglin, safety director at Christman Constructors, Inc., a MIOSHA partnership is an opportunity to take a critical look at your current safety and health management system and identify areas where there is room for growth.

“The partnerships truly highlight what a unique and valuable resource MIOSHA is to the workers and businesses of Michigan,” said Anglin. “They foster a collaborative environment to improve job place safety that truly benefits everyone that participates. By working with MIOSHA, a company is given a unique opportunity to earnestly assess their safety program, exchange ideas with business peers, and draw upon the resources of the partnership to achieve substantive and enduring improvements for the profession as a whole.”

Anglin cautions that the work that goes into a partnership isn’t easy, but worthwhile.

Continued on next page
For Ted Bergin, safety director of the Wolverine Building Group, MIOSHA partnerships are all about the opportunity for learning.

“We’ve learned a lot,” said Bergin. “There’s new perspectives, like how to look at the health aspects of a construction project. These are things I simply did not know, and that kind of information is gold.”

Bergin noted that the knowledge gained isn’t just limited to his team of employees either; it spreads to everybody on the site. Jim Getting, a senior construction safety consultant with MIOSHA, acknowledges that same benefit. According to Getting, the expectation and understanding that work can be done safely is spread to the subcontractors, who then work safer on the next project, and it snowballs from there.

Bergin also highlighted improved communication on projects in which the company has partnered with MIOSHA, where employees feel comfortable voicing safety and health concerns.

In regards to a recent senior housing redevelopment project in Fremont, Bergin said, “Communication has been tremendously elevated on this project. We are talking to each other openly and honestly. The foreman at one of our meetings felt comfortable enough sitting here in an open meeting to tell us honestly what he thought, knowing he wouldn’t be punished for it. There’s a lot of meetings where they wouldn’t say something like that.”

So, maybe companies like Christman and Wolverine have benefited from these cooperative relationships, but why should your company partner with MIOSHA?

For Anglin, the message is simple.

“Seek them out and take advantage of the opportunity to improve the safety of your company,” he said. “The partnerships with MIOSHA have helped us develop a safety culture that is more proactive and inclusive, our project teams and subcontractors are now better trained and more safety conscious, and we’ve come to view MIOSHA as a valuable resource.”

To find out more about how you can partner with MIOSHA, visit the MIOSHA website.

#### Best Practices: Johnson Technology, Inc.

Doug Kimmel, Michigan Voluntary Protection Program (MVPP) Specialist, Consultation, Education and Training (CET) Division

Johnson Technology, Inc. (JTI) of Muskegon, MI was originally established in 1963 as Johnson Mold and Manufacturing. JTI eventually moved to its Latimer Drive location as business continued to grow in the production of nozzle segments for aircraft engines and power generation operations. Today, JTI produces nozzle segments and shrouds for both commercial and military engine programs including the CFM-56 flown on the Boeing 737, the GEnx flown on the 787 Dreamliner, the T-700 engine flown in the Blackhawk helicopter, and the F-402 engine flown in the F/A-18 Hornet. Manufacturing processes at JTI include CNC grinding, brazing/heat treat, laser drilling, electrical discharge machining, and thermal barrier coating. In 1997 JTI opened a second manufacturing site in Norton Shores. That same year, JTI was acquired by the General Electric (GE) Company.
After GE’s acquisition, JTI embarked on its journey toward Michigan Voluntary Protection Program (MVPP) Star designation. The Latimer plant received “Star” status in 2003 with the Norton Shores site receiving certification a year later. Since that time, JTI has been recognized consistently for year-over-year excellence in environmental, health and safety in GE Corporate Aviation. One of its most celebrated achievements has been recognition by GE Corporate Environmental Programs as one of three top sites in North, South and Central America for environmental health and safety (EHS) performance for 2012. This designation is impressive and recognizes outstanding efforts made to implement all the elements of a safety and health management system.

At present, JTI employs 650 associates at its two Muskegon locations, making it one of the largest employers in Muskegon County. JTI remains a solid contributor to GE Aviation’s supply chain and our communities.

**Management Commitment**

The “I am EHS” initiative was launched in January of 2012. The focus of “I am EHS” was to energize associates and to recognize outstanding safety performance during 2011. This three-week event included a lunch for all associates and wristbands proclaiming support for EHS. During this time, associates were asked to write and post in five words or less what EHS meant to them. Many associates were involved making this a very successful initiative.

One of the longest held traditions at JTI has been the weekly leadership meeting that addresses open EHS items. The purpose of this meeting is to review items that are generated through shop floor inspections and audits, associate concern reporting, and leadership shop walks. Near-miss events, first aid cases, and recordable injuries are also reviewed during this meeting. The meeting’s focus is on root cause analysis and the development of a robust corrective action to prevent further “defects.” This weekly rhythm also enables best practice sharing between JTI’s two sites. Further, this review demonstrates that leadership is committed to correcting health and safety issues.

Recently, the review of near misses and recordable injuries has expanded to cover events experienced at the more than 80 sites in the GE Aviation supply chain worldwide. This sharing of events within the supply chain has offered a greater understanding of challenges facing all GE Aviation sites. Additionally, many lessons learned from other aviation sites have been leveraged to the Muskegon sites.

**Hazard Identification**

Job Safety Analysis (JSA) is a valuable tool to identify the hazards of performing a given task. The JSAs developed at JTI include the means of how its associates can protect themselves while performing a task. New associates are trained using the applicable JSAs before they start on the job. Likewise, associates who move between manufacturing areas are trained utilizing JSAs if they are going to be exposed to a new process.

Through associate feedback and review of their JSAs it was determined that a makeover of the JSA program was necessary in order to provide improved communication of task hazards. JSAs are now being modified to include photographs, pictograms, and text of varying size and color. This visual approach to JSAs has demonstrated great potential initially with positive feedback. While still in the revision process, it is anticipated that a complete transition and training of all associates on the new JSAs will be finished later this year.
Hazard Prevention and Control

Ergonomics - JTI has invested significantly in ergonomic improvements in the shop. Adjustable benches have replaced most fixed benches. The adjustable benches allow associates the option to sit or stand. Ergonomic improvements are not just limited to the shop. Recent upgrades to office areas include adjustable desks that can be adjusted to different heights for sitting and standing.

Raw material and work in process is no longer stored on the floor, below the knees, or above shoulder height. Production parts are stored in the “strike zone” with self-adjusting, waist-level carts. Material that is in transit to different operations on the shop floor is transported using self-leveling carts that maintain waist-level height.

In-Machine Deburring - Many of JTI’s manufacturing processes leave significant burrs and slivers on the stainless alloys it machines. This requires significant time to manually remove, thus exposing associates to substantial ergonomic risk. To minimize this hazard, JTI has invested significant effort and resources in automated part deburring. Instead of manually deburring a production part, deburring tools are used at the end of a machine cycle to automatically deburr the part while still in the machine. In some cases, a production part is loaded into a dedicated CNC milling machine to complete the deburring process.

The improvement with in-machine deburring isn’t limited to ergonomic risk reduction and associated costs, such as workers’ compensation insurance. JTI has found that automated processes generally produce a more consistent and reproducible part that improves quality. Also, the overall cycle time of a given operation can be reduced significantly, improving output and ultimately customer satisfaction. These are tangible benefits that demonstrate safety truly does pay!

Noise Mitigation - JTI aggressively addresses noise in the shop through engineering controls. As part of its management of change process, new equipment must produce less than 80 dBA operating sound levels. This proactive approach to new equipment procurement eliminates the hazard before it is introduced. But there are other efforts to reduce noise, too. These include, but are not limited to: reducing the need for air hoses for blow-off and limiting dead-end pressure to 30 psi, sound curtains around operations that produce undesirable noise levels, and constant area monitoring to ensure our engineered controls are effective. Individual associate monitoring is also completed annually by a certified industrial hygienist to ensure acceptable noise levels in all manufacturing areas. These efforts have enabled JTI to avoid the need for a hearing conservation program. Most importantly, these measures minimize noise exposure hazards to associates.

Training

Associate training has also been reenergized with site-specific training videos that have been created in-house. Training subjects including evacuation procedures, HAZCOM and PPE use and care have been converted to video, thus making the learning experience much more consistent, meaningful and lasting. The transition to videos for training will continue with the collaboration of environmental health and safety, an advertising and public relations major from Grand Valley State University (who is developing the videos), and the associates from shop floors who participate in the videos.

All of the best practices as described above may not work for every company. However, as with many best practices, sometimes only minor modification is needed for them to work in a different scenario, manufacturing process, or environment. Further, associate involvement is a critical element to lasting improvement with any best practice. If you are interested in learning more about how to develop and implement a safety and health management system, visit the MIOSHA website to view the courses offered through the MIOSHA Training Institute.
Primary Metal Manufacturing (NAICS 331) is one of the 10 high-hazard industries targeted by MIOSHA for enforcement and outreach activities during 2014-2018 because of high injury and illness rates in the industry. The incidence rate of nonfatal occupational injuries and illnesses in primary metal manufacturing in Michigan in 2012 was 10.1 cases per 100 full-time workers, compared to 4.0 cases for all private employers.

The primary metal industries are a group of establishments engaged in the smelting and refining of ferrous and nonferrous metals. These metals are refined from iron ore, pig iron, and scrap. The output is used in rolling, drawing, casting, and alloying metal operations. These operations are used to make basic metal products like sheets, strips, bars, rods, wire, and castings. Common metals include steel, iron aluminum, copper, and alloys.

Health and Safety Hazards

Individuals employed in the primary metal industries (smelting and refining of ferrous and nonferrous metals) are exposed to serious hazards on a daily basis like chemical exposures, noise, and heat. Chemical exposures found in these facilities include carbon monoxide, metal dusts and fumes, formaldehyde, isocyanates, and organic solvents. These hazards can affect workers’ overall well-being, as well as affect specific organs such as the lungs, skin, liver, and kidneys. For example, cadmium metal and its compounds are known to cause cancer and target the body’s cardiovascular, renal, gastrointestinal, neurological, reproductive, and respiratory systems. Exposure to lead can cause neurological effects, gastrointestinal effects, anemia, and kidney disease. Exposure to noise can lead to hearing loss. Overexposures to heat stress can produce rashes, fainting, and even death.

Sprains and strains are the most common injury and illness in the industry. Material handling and heavy lifting bring on back and shoulder problems and other musculoskeletal injuries and illnesses.

Case Study: Power Plant

An employer was salvaging metal and equipment from a defunct power plant adjacent to Morrow Pond in Comstock Township, MI, when MIOSHA conducted an investigation of the work site. The employer was removing asbestos-containing thermal system insulation from pipes, fittings, boilers, breeching, tanks, ducts, and other structural components of the plant, and was not protecting its employees from exposure to the asbestos. The employees were also exposed to lead fumes and dust when they used oxygen and acetylene torches to cut up metal parts that were coated with lead-containing paint. The employer was cited for violations of the MIOSHA asbestos and lead regulations, as well as the Michigan Asbestos Workers Accreditation Act. The total initial assessed penalty was $52,350, which was reduced to $18,000 on appeal.

The Environmental Protection Agency’s Criminal Investigation Division also investigated the work site and company officials all pled guilty to felony offenses of the U.S. Clean Air Act.
Workers are also exposed to serious safety hazards. These encompass falls from elevated surfaces; crushing in material storage and scrap metal handling areas; cuts, crushing, and impaling hazards from moving machinery; burns when dealing with hot metal; and slips, trips and falls from bad housekeeping practices. The equipment and materials used in this industry can expose employees to falling objects, flying particles, pinch points, and electrical hazards.

MIOSHA Standards

Many MIOSHA standards apply to this industry. The applicable General Industry Safety Standards include Parts 1, 2, 18, 21, 23, 24, 33, 39, 40, 42, 44, and 85. The Occupational Health Standards include Parts 301, 306, 308, 309, 310, 314, 380, 430, 433, 451, 470, 472, and 474. These standards, and publications related to the hazards, are located on the MIOSHA website at www.michigan.gov/miosha.

Revised National Emphasis Program (NEP)

In October 2014, federal OSHA re-issued its national emphasis program (NEP) for the primary metal industry. The original NEP was issued in 2011. In December 2014, MIOSHA adopted the revised NEP and the associated federal OSHA compliance directive, CPL-03-00-018, National Emphasis Program - Primary Metal Industries.

The NEP targets the primary metal industries, such as foundries and establishments that manufacture nails, insulated wires and cables, steel piping, and copper and aluminum, including 16 SIC codes and 17 NAICS codes. The specific SIC and NAICS codes are listed in the NEP. The revised NEP leaves the required number of inspections per year to MIOSHA’s discretion (previously there was quota), and it discontinues the expiration date for the NEP. MIOSHA will continue to conduct random, programmed inspections in the metal industries as part of its revised Hazard Communication Standard. The NEP retains the inspection procedures, citation guidance, and outreach information as a way to assure that inspections continue to address the health-related hazards in these industries.

MIOSHA’s Consultation, Education and Training (CET) Division is available to employers so they may take steps voluntarily to correct hazards and comply with current safety and health regulations and practices. Employers can contact CET at 517-322-1809 for a free evaluation of their work place.

Employee Discrimination - Know Your Rights!

Tanya Baker, MIOSHA Communications Representative

Under the Michigan Occupational Safety and Health (MIOSH) Act, employees have certain rights and responsibilities. When an employee exercises these rights, it is unlawful for an employer to discriminate against that employee.

Should an employee face discrimination for filing a safety and health complaint; assisting a MIOSHA representative during an inspection or investigation; or refusing to work when confronted with an imminent danger that could cause death, injury or illness – this is a violation of their rights under the MIOSH Act.

Types of employer discrimination include:

- Discharge
- Demotion
- Suspension
- Harassment
- Other types of disciplinary action

An employee who believes they have been discriminated against or that their rights have been violated under the Act, may file a complaint with MIOSHA’s Employee Discrimination Section (EDS) within 30 days of the incident.

Continued on next page
Employee Discrimination (Continued)
Tanya Baker, MIOSHA Communications Representative

Discrimination Investigation Process

A discrimination complaint under MIOSHA can be verbal, electronic or in written form to management, employee organizations and/or to the news media. These complaints do not have to be filed directly with MIOSHA for the provisions to apply. Discrimination complaints under the MIOSH Act must be made within 30 days of the date of the alleged discrimination. This is a strict time frame, and employees need to keep this time limit in mind. Unfortunately, each year there are employees who may have valid complaints but have allowed the allotted time to file a complaint lapse.

A discrimination complaint will normally be opened for an investigation when it is alleged that an employee is discriminated against in some manner for complaining of a safety and health issue. The allegation must include:

- An employee who is engaged in a protected activity,
- An indication the employer had knowledge of the protected activity, and
- As a result, the employee suffered an adverse employment action.

Once a complaint is filed, a screening process takes place to ensure that the complaint contains the necessary elements. If it meets the criteria, the complaint is given a docket number and assigned for investigation. The employer is advised of the pending investigation in order to provide rebuttal to the charge. After all witnesses are interviewed and documents reviewed, a determination order is issued, either upholding the complaint or dismissing it. Both parties – the employer and the employee – have the right to appeal this decision to an Administrative Law Judge (ALJ) with the Michigan Department of Licensing and Regulatory Affairs, Michigan Administrative Hearing System, and ultimately, to the court system. This appeal process affords both the employee and the employer an opportunity to present their positions in a neutral environment.

Recent Cases

**Discipline for Reporting Injuries:** In the last few years, MIOSHA’s EDS has received more than 30 complaints against the same employer. These complaints allege that the employer consistently disciplines employees who report injuries requiring medical attention, always citing that the injuries were preventable. EDS has been able to reach settlements in many of the cases that were going to be ruled in favor of the employee. A few of the cases have been withdrawn by the employee. There were hearings held in four of the cases, where EDS ordered the employees to be made whole (i.e., back pay, clearing of the discipline from their personnel file) and the employer appealed the decision. The ALJ confirmed EDS’s rulings and the employees have all been made whole.

**Reporting an Injury and Verbal Complaint:** An employee received a needle stick and became even more upset when it became apparent the employer had no procedures in place to handle such an injury/incident. The employee expressed their concern and turned in a two-week notice. Though the employee was released to return to work without restrictions, the employer decided to keep the employee off for a few more days because they felt “they were not ready to return,” and that they had overreacted to the situation. EDS investigated and was prepared to issue a decision in favor of the employee, but was able to reach a settlement with the parties prior to issuing the decision.

**Employee Work Slow Down:** An employee noticed a sensor light on their machine that they hadn’t noticed before. Numerous management personnel and even a union official advised the employee that the light dealt with production and was in no way related to safety. The employee proceeded to work “cautiously and very slowly” even after repeated attempts from personnel to reassure her of the light’s purpose. The employee was suspended. The complaint was dismissed without merit and the employee appealed the matter. The ALJ upheld the MIOSHA decision.
FAQs: Employee Discrimination

Q: If I file a discrimination complaint and you rule in my favor and order back pay and reinstatement, do I have to return to work?  
A: No; if and when the offer of reinstatement is made, you can decline the offer. You would still be entitled to the back pay award, but it would cease accruing when the reinstatement offer is declined.

Q: Can my allegation be investigated if it is filed beyond the 30 day filing time due to waiting for the outcome of the grievance process?  
A: No; there are specific conditions that do not justify extending the filing period. Those include, ignorance of the law; filing unemployment and workers’ compensation claims; filing a private lawsuit; and filing grievance or arbitration. A reason the filing time could be extended includes if the employee is unable to file within the statutory time due to a debilitating illness or injury.

Q: If I verbally complain of safety to my employer, is that protected activity?  
A: Yes; however, you have to be able to establish that you verbally complained through witnesses and/or employer admission or some other means.

Fact Sheet: Fall Protection

Falls are one of the leading causes of fatalities in the construction industry, accounting for 279 of the 806 construction fatalities recorded in 2012, nationally. MIOSHA investigated 43 fall-related fatalities at construction sites from 2002-2006. In 2014, MIOSHA investigated seven fatalities, three of which were fall-related. Between 2010 and 2014, falls consisted of 41 percent of the fatalities in the construction industry in Michigan; those were preventable.

Almost all construction work sites have unprotected sides and edges, wall openings, or floor holes at some point during construction. If these sides and openings are not protected at the work site, injuries from falls or falling objects may result, ranging from sprains and contusions to death. MIOSHA Part 1, General Rules, Rule 114, requires an Accident Prevention Program at every construction work site which must address fall hazards. MIOSHA, Part 45, Fall Protection, addresses minimum requirements and criteria for fall protection at construction workplaces.

How To Avoid Hazards

- Use at least one of the following whenever employees are exposed to a fall of six feet or more above a lower level: guardrail systems; safety net systems; and personal fall arrest systems.
- Cover or guard floor holes as soon as they are created during new construction.
- For existing structures, survey the site before working and continually audit as work continues. Guard or cover any openings or holes immediately.
- Construct all floor hole covers so they will effectively support two times the weight of employees, equipment, and materials that may be imposed on the cover at any one time. Covers must be secured and color coded or marked with the words "HOLE" or "COVER."
- In general, it is better to provide fall prevention systems, such as guardrails, than fall protection systems, such as safety nets or fall arrest devices, because they provide more positive safety means.
Fatality Case Study: Plastic Parts Manufacturer

The MIOSHA GISHD conducted three inspections at a plastic parts manufacturer following a fatal workplace injury that occurred at the facility in 2014. The fatality occurred when an employee was inside an injection molding machine cleaning the mold while the machine was energized and in automatic mode. Not knowing the employee was inside the machine, another employee cycled the machine and crushed the employee in the machine.

While investigating the fatality, GISHD learned of other employees entering the injection molding machines while they were energized. Thus, a second inspection was opened several days after the fatality to conduct a comprehensive examination of the safety and health compliance of the establishment. The third inspection was in response to a complaint received a couple of months later.

The three inspections resulted in 32 serious citations, 9 willful-serious citations, and 14 other-than-serious citations. The initial penalties totaled $558,000. Note that the employer has the right to appeal the citations, so the final penalty and citations may differ. The violations are from the following standards: Section 11(a) of the MIOSH Act; Part 1, General Provisions; Part 1A, Abrasive Wheels; Part 2, Floor and Wall Openings, Stairways, and Skylights; Part 6, Fire Exits; Part 7, Guards for Power Transmission; Part 12, Welding and Cutting; Part 14, Conveyors; Part 18, Overhead and Gantry Cranes; Part 21, Powered Industrial Trucks; Part 26, Metalworking Machinery; Part 33, Personal Protective Equipment; Part 39, Design Safety Standards for Electrical Systems; Part 40, Electrical Safety-Related Work Practices; Part 49, Slings; Part 62, Plastic Molding; Part 75, Flammable And Combustible Liquids; Part 85, The Control of Hazardous Energy Sources; Part 90, Permit-Required Confined Spaces; and Parts 92 and 430, Hazard Communication.

The most serious violations include:

**Part 14, Conveyors**

- 408.11412(3) – Pick-and-place conveyor not locked out. Employees were inside the mold area to clean the molds of horizontal molding machines while the auxiliary pick-and-place conveyor was energized and running in automatic mode.

**Part 62, Plastic Molding**

- 408.16211(1) – Inadequate training; employees were allowed to bodily enter mold area by going under the unguarded portion of the front and rear gates while the machines were energized.
- 408.16227(2) – Not locking out the machine; employees bodily entered the mold area of horizontal molding machines to clean molds while it was energized.
- 408.16234(1) – No guard below front and rear gates of injection molding machines to prevent an employee from reaching into the point of operation.

**Part 85, The Control of Hazardous Energy Sources**

- 1910.147(c)(4)(i) – Machine-specific lockout procedures were not developed for injection molding machines or pick-and-place conveyors.
- 1910.147(c)(7)(i)(A) – An authorized employee was not trained in lockout, or provided lockout devices.
- 1910.147(c)(7)(i)(B) – An operator was not trained in lockout as an affected employee.
- 1910.147(c)(7)(i)(C) – An employee that was supervising the operation of the plastic molding machines was not trained in lockout.
Aria Energy in Lenox Recognized for Outstanding Workplace Safety and Health
Aria Energy, a leading provider of baseload renewable energy, was awarded its first Michigan Safety and Health Achievement Recognition Program (MSHARP) award in March 2015 for an exceptional safety and health management system at its Pine Tree Acres landfill gas-to-energy facility located in Lenox, MI.

Harris Rebar in Lansing Receives MSHARP Award for Workplace Safety and Health Excellence
Harris Rebar, a reinforcement bar manufacturing plant in Lansing, was awarded its first MSHARP award in March 2015 for an outstanding safety and health management system. One of Harris Rebar’s safety improvements includes newly developed software to track hazard corrections.

Pfizer Global Supply in Kalamazoo Named Star Site a Third Time for Exemplary Worker Safety
Pfizer Inc. Global Supply in Kalamazoo was awarded the state’s highest workplace safety and health award, the Michigan Voluntary Protection Program (MVPP) Star Award in March 2015.

The Christman Company, Daniels Building Co., Inc. and MIOSHA Sign Partnership to Protect Workers During State Emergency Operations Center Project
The Christman Company (Christman) Daniels Building Co., Inc. (Daniels), LARA, MIOSHA and partnering subcontractors signed a formal partnership in February 2015 with the goal of enhanced safety and health protection, and zero worker injuries during the construction of the state’s new State Emergency Operations Center.

Team Elmer’s and MIOSHA Sign Partnership to Protect Workers During Reconstruction of US-31/M-72
The Traverse City-based and family-owned company, Team Elmer’s, LARA and MIOSHA signed a formal partnership in April 2015 with the goal of enhanced safety and health, and zero worker injuries during the reconstruction of US-31 between 3 Mile Road and Holiday Road.

MIOSHA Renews Alliance with Michigan Non-Profit Facility to Protect Workers
The Michigan Laborers’ Training & Apprenticeship Institute (MLTAI) and MIOSHA renewed a formal alliance on March 10 to help members and participants recognize and prevent construction hazards to foster safer and more healthful Michigan workplaces.
Standards Update

MIOSHA staff has completed work with respect to the Office of Regulatory Reinvention’s (ORR) Workplace Safety Advisory Rules Committee recommendations. A few of these standards must complete the process before becoming effective, however, the process should be completed by July, 2015. To help communicate the status of these changes, the status update page on the ORR website is updated regularly.

MIOSHA Standards Recently Revised

- CS Part 6 Personal Protective Equipment
- CS Part 45 Fall Protection
- GI Part 40 Electrical Safety-Related Work Practices
- GI Part 62 Plastic Molding

Final versions of these revised standards can be viewed on our standards web page.

MIOSHA Standards Being Revised

- CS Part 10 Cranes and Derricks
- CS Part 16 Power Transmission and Distribution
- CS Part 15 Excavators, Hoists, Elevators, Helicopters and Conveyors
- GI Part 33 Personal Protective Equipment
- GI Part 39 Design Safety Standards for Electrical Systems
- GI Part 45 Die Casting
- GI Part 74 Fire Fighting
- GI Part 85 The Control of Hazardous Energy Sources
- GI Part 86 Electric Power Generation, Transmission and Distribution
- OH Part 509 Illumination for Pulpwood Logging
- OH Part 510 Illumination for Sawmills
- OH Part 523 Abrasive Blasting
- OH Part 529 Welding, Cutting and Brazing
- ADM Part 11 Recording and Reporting of Occupational Injuries and Illnesses

Watch the MIOSHA standards web page (see link above) for final versions once they are approved. For more information regarding these proposed changes, go to the ORR proposed rule status page and click on “proposed revision info” adjacent to the specific standard.