

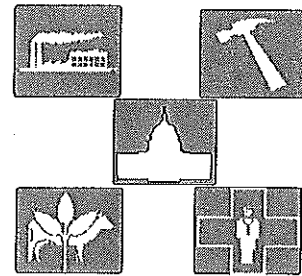
Safety Lines

The Newsletter of Minnesota OSHA

Number 40

Summer 2003

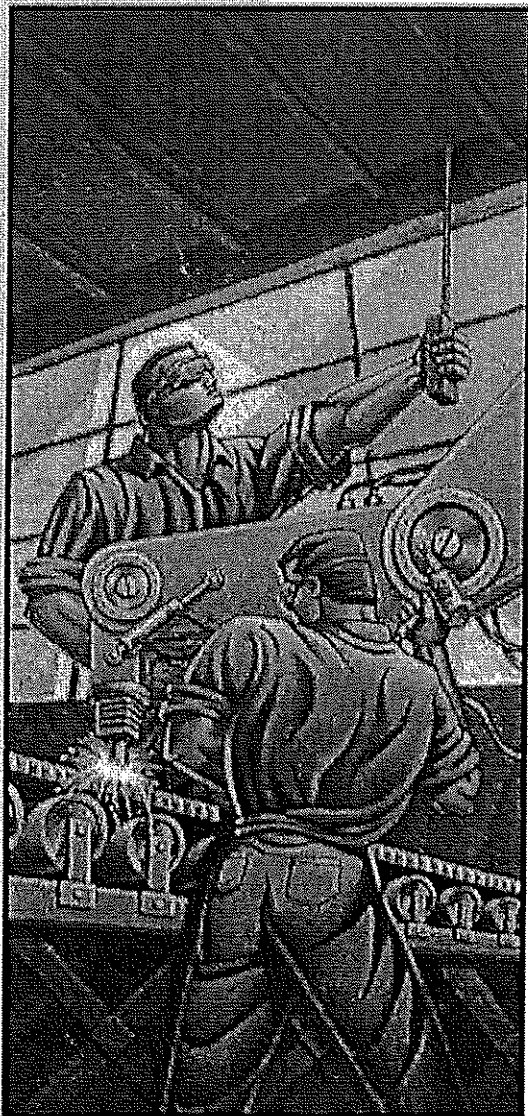
<http://www.doli.state.mn.us>



Minnesota OSHA focuses on lockout/tagout standard

By Nancy Zentgraf, Principal Safety Investigator

One of Minnesota OSHA's goals is to lower workplace injuries and illnesses. As part of that goal, MNOSHA is focusing on the lockout/tagout standard. The lockout/tagout standard ensures machinery is isolated from its energy source and rendered inoperative, to avoid injuries.



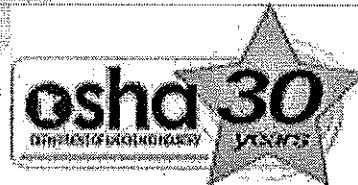
In March 2003, a metal-stamping shop employee was working as the operator and set-up person for a 250-ton power press. He had been performing this job for more than four years.

The employee started changing the die on the press, inserting a knockout rod under the ram with his right hand while he pressed the inch button with his left hand, when the machine cycled and the employee was not able to remove his arm. The employee lost his right arm below the elbow.

The employer was cited for not having specific written lockout procedures under 1910.147(c)(4), Control of Hazardous Energy (Lockout/Tagout), as well as under 1910.217, Mechanical Power Presses.

- Lockout/tagout continues on page 2

The Minnesota OSHA Compliance program turned 30 on Aug. 1. The program began operation Aug. 1, 1973.



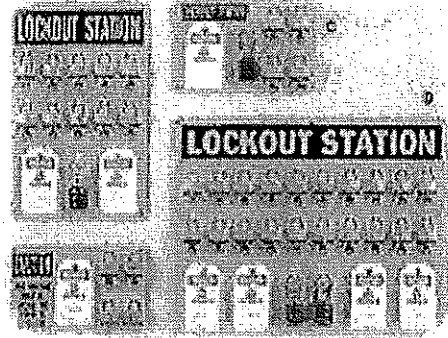
Since its inception, the program has grown from 42 to 87 employees. The compliance area, in 1973, covered approximately 1.3 million employees within the state of Minnesota; in 2003, it covers approximately 2.5 million. Minnesota's injury rate per 100 full-time employees has dropped from 15.2 in 1973, to 6.2 in 2001.

A small celebration with present and past staff members will be conducted from 1:30 to 3 p.m., Aug. 15, at the Department of Labor and Industry in St. Paul. Look for a 30-year recap in the next edition of *Safety Lines*.

- Lockout/tagout continued from page 1

MNOSHA believes if the lockout/tagout standard is followed, injuries such as the one described above can be eliminated. The main areas of emphasis contained in the standard are: individual, machine-specific, detailed procedures; training of authorized, affected and other employees in the procedures and information needed; and certification of annual inspection of each procedure.

Employers should make sure, before any employee performs any service or maintenance on a machine or piece of equipment where the unexpected energization, start-up or release of stored energy could occur and cause injury, the machine or equipment is isolated from the energy source and rendered inoperative.



Procedures

Lockout procedures shall be specific for each type of machine or equipment. Procedures are to be written, unless the employer can meet *all* eight of the exceptions listed in the standard. The procedures need to outline the scope and purpose of the work to be performed on the machine or equipment. For example, if the employee is going to maintain everything *except* the hydraulics on the machine, the scope should state this exception.

The procedures are to state who is authorized to work on each machine and what discipline or enforcement will be implemented if the procedure is not followed. The procedures should state the techniques utilized for the control of the hazardous energy. Appendix A, which is found at the end of the standard, may be used as a guide for developing procedures.

In the accident described previously, the employer had a generic lockout procedure that was vague and incomplete. The employer had been cited under 1910.147 before, so the new citation was classified and penalized as a repeated violation.

Training

Employers must train employees about the purpose and function of the energy-control program to ensure they understand and use the procedures. Authorized employees must be trained before they perform servicing or maintenance on the machine or equipment.

Affected employees also need to be trained about the purpose and use of the energy-control procedures. All other employees, who work in the area where machines are locked out, are to be instructed about the procedures and the prohibition of restarting machines that are locked out. Retraining is required when there is a change in job assignment, a change in machine, equipment or process that presents a new hazard or a change in the energy-control procedure. Additional retraining is required when the periodic inspection reveals a deficiency.

Inspection

The employer should conduct an annual inspection of the energy-control procedure. An authorized employee, other than the one using the energy-control procedure, should conduct the periodic inspection. The annual inspection should be certified.

MNOSHA investigators will be reviewing lockout/tagout documentation as part of the records review during the inspection. While in the plant, the investigators will be documenting that procedures are followed, training is conducted and the annual inspection has been performed. Employers, employees and Minnesota OSHA – working together – can eliminate these injuries.

Dig in: Take time for trenching safety

By Gary Robertson, Training Officer

“Each employee in an excavation shall be protected from cave-ins by an adequate protective system.” Does this sound familiar? With the construction industry already in full swing this season, each and every person associated with trenching should have this phrase memorized. However, that isn’t happening.

In 2002, there were 141 trenching-safety citations issued in Minnesota. Of these, 132 were classified “serious” and three of these were “repeat” citations. Somehow, the message about the importance of taking time to protect the people who have to work in trenches is not getting through to Minnesota’s construction industry.

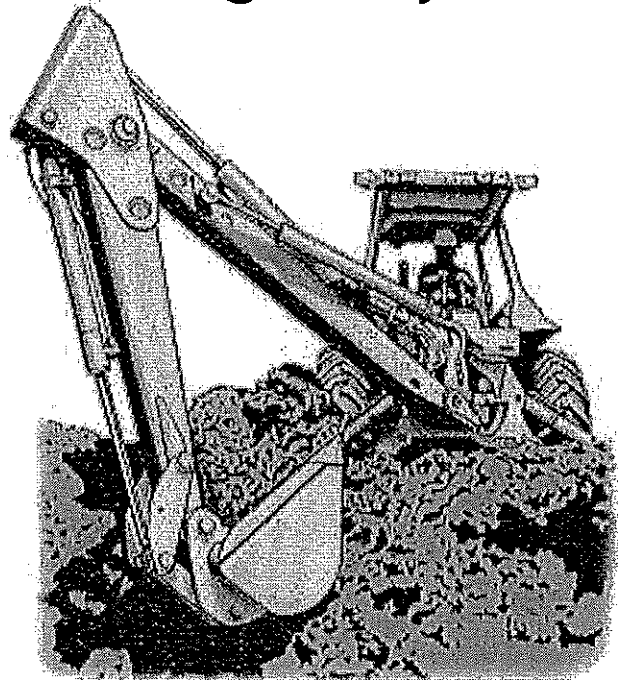
The 2002 citations were distributed to large and small companies, union and non-union companies, companies from out of the state and Minnesota companies as well.

The 2003 construction season is not faring any better. There have already been 35 trenching-safety citations issued as of June – 33 of these were “serious” violations, with one “willful” and one “repeat” citation.

Unfortunately, Minnesota OSHA knows a majority of the unsafe trenching practices are not seen and go unreported. It also knows from interviewing the violators that they do know what is required to protect their employees from trenching accidents. So why does this continue to happen year after year?

Time and money seem to be the driving forces. Get the job done and move on. It’s a very competitive industry. Besides most trenches *seem* safe, don’t they? But remember, nothing can be more deceptive than the harmless appearance of a trench. Consider: One cubic yard of dirt weighs about 3,000 pounds. The trenching fatality rate is 112 percent greater than that for all construction accidents. And the vast majority of Minnesota trench-fatalities are occurring in trenches only five to 15 feet deep.

Sound, safe trenching-practices will pay for themselves in the long run, and at the end of each day when all employees return home safely. It’s also the law to protect those working in trenches from cave-in accidents. When violations are seen or reported, they will be cited. Take the time for trenching safety.



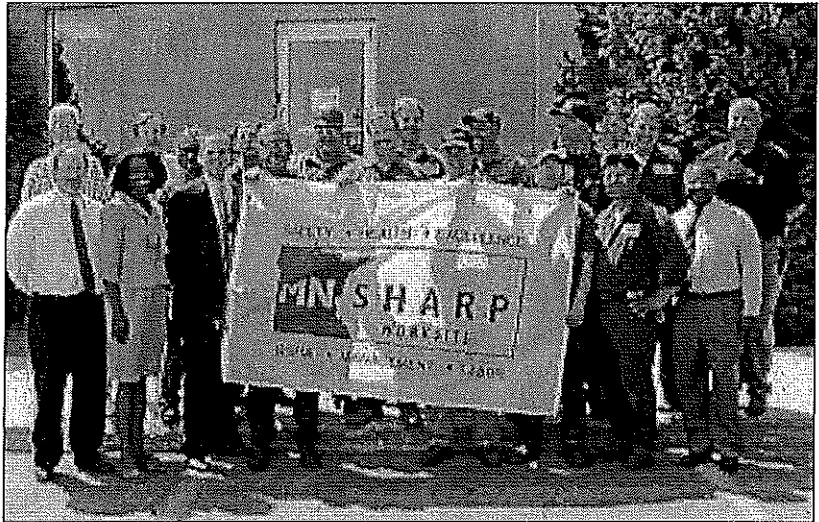
One cubic yard of dirt weighs about 3,000 pounds.



Phillippi Equipment Company awarded MNSHARP status

Workplace safety and health representatives from the Minnesota Department of Labor and Industry (DLI) recognized Phillippi Equipment Company, Eagan, Minn., for its achievement as a Minnesota Safety and Health Achievement Recognition Program (MNSHARP) worksite in July.

MNSHARP is a MNOSHA program that recognizes companies where managers and employees work together to develop safety and health programs that go beyond basic compliance with all applicable OSHA standards and result in immediate and long-term prevention of job-related injuries and illnesses. More information is available at www.doli.state.mn.us/mnsharp.html.



OSHA penalty language changed Aug. 1, 2003

Legislation was passed during the 2003 session that modified OSHA penalty laws as of Aug. 1, 2003.

General duty citations

General duty citations were amended to say that "if a serious violation under section 182.653, subd. 2, causes or contributes to the death of an employee, the employer shall be assessed a fine of up to \$25,000." Previously, the law provided that a general duty citation could not exceed \$7,000 for each violation.

Small-employer exception

The OSHA law was also amended to say that "if there is no willful or repeated violation and the employer has fewer than 50 employees, the employer shall be assessed an initial fine of \$5,000 and an additional fine of \$5,000 for each of the following four years. The commissioner may elect to waive the \$5,000 fine for any of the following four years if the employer received no citations in the preceding calendar year."

The law modification also provides that "if the business or enterprise employs fewer than 50 employees, this subdivision (part of the law) may not apply to the death of an employee who owns a controlling interest in the business or enterprise, except if the commissioner determines that a fine shall be assessed."

OSHA criminal penalties

OSHA criminal penalties were increased from a maximum of \$20,000 to a maximum of \$70,000 for a first violation. For a subsequent violation, the fine was increased from a maximum of \$35,000 to a maximum of \$100,000.

Safety Lines is a free quarterly publication of the Minnesota Department of Labor and Industry. Its purpose is to promote occupational safety and health and to inform readers of the purpose, plans and progress of MNOSHA. Questions, comments and story submissions are welcome. News material may be reproduced provided the department is contacted and credited.

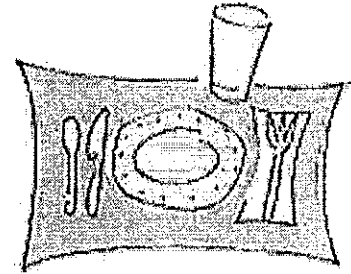
Send comments, submissions and subscription requests to: Jenny O'Brien, editor, Minnesota Department of Labor and Industry, 443 Lafayette Road N., St. Paul, MN 55155; phone (651) 284-5261; e-mail DLI.Communications@state.mn.us.

This material can be provided in different formats, such as Braille, large print or audiotope, by calling Minnesota OSHA at (651) 284-5050 or (651) 297-4198/TTY.



A moveable feast

Construction Breakfast program finds new home, new schedule



By Gary Robertson, Training Officer

Minnesota OSHA's Construction Breakfast program has a new location! After several months of searching, it has been decided to conduct this valued safety program at the Minnesota Department of Health, Conference Center, located at 1645 Energy Park Drive, Suite 300, St. Paul, Minn. A map and directions will soon be posted on MNOSHA's Web pages.

The dates and topics for the next five meetings are:

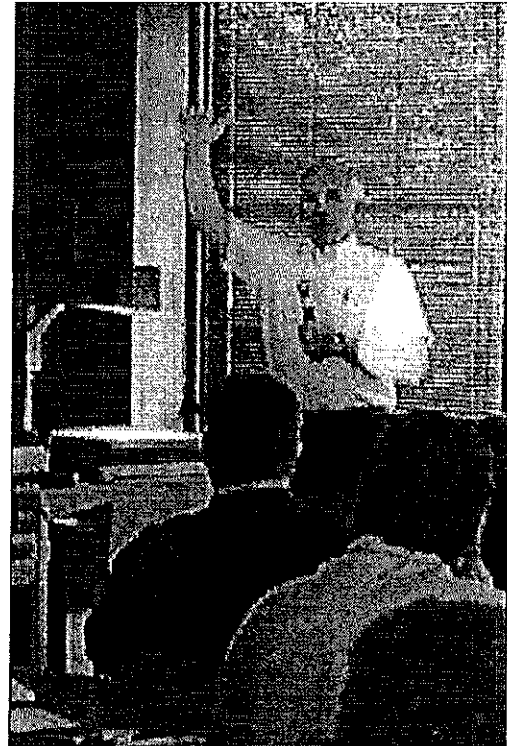
- **Sept. 16** – Excavation and trenching safety
- **Nov. 18** – Cold weather hazards: carbon monoxide monitoring; privies at construction and engineering projects; jobsite shelter; walking and working surfaces
- **Jan. 20** – Fatalities in Minnesota's construction industry
- **March 16** – Forklift safety
- **May 18** – Residential fall-protection

For details about the programs or to register as a participant, plus a map and directions to the new location, visit the Department of Labor and Industry Web site at www.doli.state.mn.us/brkfst.html.

Gone are the days of craning to see around the posts in the middle of the room, crowded seating and lack of parking. The new location's Mississippi Room has space to seat as many as 150 people. There is also ample parking – that does not require a permit, an excellent sound system, two projectors and screens, and an elevated stage. We're even considering adding some new varieties to the breakfast menu.

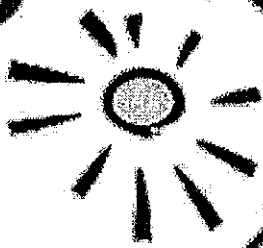
A reminder about the new location will be sent to the companies on our mailing list, as well as those on our newly created e-mail list, a few weeks in advance of the first session. The sessions will now be on the third Tuesday of every other month, starting in September, instead of the third Wednesday.

We look forward to seeing all of you again in the fall. We wish you a very safe, accident free and prosperous summer.



John Porter, vice president of sales, We Buy Sell Equipment Inc. (WBSE), addresses the crowd during a MNOSHA Construction Breakfast in the Department of Labor and Industry's Minnesota Room. The breakfast seminar topic was aerial-lift safety.

HOT TIPS



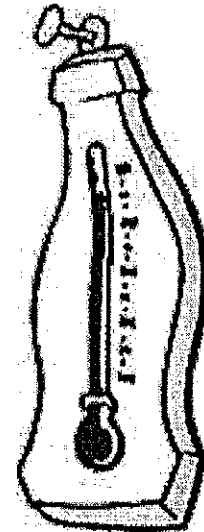
for avoiding **heat stress**

Heat stress may occur anytime in some industries or for only a few days during the summer during almost any work or play activity. Heat stress can result in several illnesses, decreased productivity and – potentially – death.

The most important factor in preventing heat stress is adequate water intake. Thirst is not an adequate indicator of hydration. When the body becomes dehydrated, it is difficult to rehydrate, because the body needs time to absorb water. Therefore, adequate water intake throughout the day is necessary. A person should drink five to seven ounces of cool water every 15 to 20 minutes. Under conditions of profuse sweating, commercial electrolyte replacement drinks may be appropriate.

A person should be aware of the typical symptoms of heat stress and know how to deal with them:

- If muscle spasms occur in the arms, legs or abdomen, drink water and eat salty foods.
- If fatigue, weakness, dizziness, faintness, nausea or headaches occur, move to a cool area and drink plenty of cold water.
- If loss of consciousness, rapid pulse or convulsions occur, call paramedics and start cooling the victim immediately. Remove the person to a cool area, soak them in cool water and use a fan to create air movement.



Heat stress can be a serious condition. To reduce the chances of it occurring, remember to drink plenty of fluids, pay attention to your body's response and act quickly if you are in stress.

WSC outlines ergonomics plan, specialist employees



Dave Ferkul (left) and Todd Haglin (right) will be the new ergonomic outreach specialists from Workplace Safety Consultation. Ferkul, an industrial hygienist, earned his master's degree in industrial safety from the University of Minnesota – Duluth and has worked in the Minnesota OSHA compliance and consultation programs for the past 14 years. Haglin, a safety consultant principal, earned his master's degree in industrial safety from the University of Minnesota, and has worked in the Minnesota OSHA compliance and consultation programs for the past 13 years.

Each year, thousands of Minnesotans suffer work-related musculoskeletal disorders (MSDs), inflicting millions of dollars in both direct and indirect costs on employers, employees and their families. Minnesota OSHA Workplace Safety Consultation is focusing on a new effort to help employers rein in work-related MSDs through an ergonomics outreach plan that includes adding two specialized employees.

Goals of the plan are:

- Ensure staff credibility when offering recommendations for preventing work-related MSDs to Minnesota employers and employees.
- Partner with Minnesota OSHA Compliance to revise the ergonomics compliance directive and related appendices, and place them on the agency's Web site. The update directive should clearly describe the MNOSHA Compliance policy and it should also ensure its approach is as effective as federal OSHA's approach.
- Target ergonomics outreach, on-site inspection and technical assistance to those industries with the highest rates of work-related MSD claims. Ensure the outreach efforts precede Compliance inspection activities.
- Research, develop and conduct ergonomics training to prevent and reduce back injuries, with cooperation from the Nursing Homes Industry Association or a major nursing-home chain, such as Good Samaritan.
- Train and educate safety committees to conduct risk-factor assessments.
- Prioritize the Safety Hazard Abatement grants to assist employers' purchases of ergonomic equipment to reduce or prevent ergonomic injuries at their worksite.

Work-related MSD injuries comprise more than one-third of all work-related injuries and illnesses resulting in time away from work and occur among a wide array of industries and occupations.

Work-related MSDs include cumulative-trauma disorders and repetitive injuries, as well as conditions such as back sprains and strains.

The U.S. Department of Labor defines a work-related MSD as an injury or disorder of the muscles, nerves, tendons, joints, cartilage and spinal discs. Work-related MSDs do not include disorders caused by slips, trips, falls, motor-vehicle accidents or similar accidents.

Roslyn Wade reappointed as assistant commissioner

Roslyn Wade has been reappointed as the assistant commissioner of the Workplace Services Division of the Minnesota Department of Labor and Industry. She has been with the department for 18 years.

As assistant commissioner, Wade oversees the administration of the five Workplace Services units at the department: Occupational Safety and Health Enforcement, Occupational Safety and Health Consultation, Labor Standards and Apprenticeship, and Code Administration and Inspection Services.

Prior to the Jan. 1, 1998, appointment as assistant commissioner, Wade served as director of the department's Labor Standards unit.

Wade majored in business management at Alabama State University in Montgomery.



Roslyn Wade

Chuck Burin receives DLI's Arthur E. McCauley, Jr. Award



Department of Labor and Industry Commissioner Scott Brener and Deputy Commissioner Robin Kelleher congratulate Chuck Burin (center), recipient of the department's Arthur E. McCauley, Jr. Award.

For the past 40 years, Burin provided leadership and direction in occupational safety and health at federal, regional and state levels.

The annual award honors a safety or health professional who is an example of safety excellence and is named for former Minnesota Safety Council member, Arthur E. McCauley, Jr., whose work as a safety professional encompassed the attributes of this award. McCauley is regarded for his work as a manager of the Minnesota Safety Council and a member of the Minnesota Occupational Safety and Health Advisory Council. He is recognized for his dedication and tireless efforts to improve the safety and health of Minnesota's workplaces.

Timothy Kobernat replaced Burin as the federal OSHA Minneapolis area office director. He has been with the agency in a variety of positions for more than 29 years, most recently as a compliance assistance specialist. He has also taught safety courses through technical colleges for more than 25 years.

For more information about the award or to nominate someone as next year's recipient, visit www.doli.state.mn.us/oshac.html.

MNOSHA at September 'Plans that work' seminar

Minnesota OSHA Training Officer Diane Amell will address OSHA process safety management at the Sept. 30 seminar: "Plans that work: Preventing accidental releases of hazardous materials."

The one-day seminar in Shoreview, Minn., is being organized by Wakota Community Awareness & Emergency Response (CAER). For information about the seminar, visit www.wakotacaer.org.

Safety grant program awards dollars to Minnesota employers

By Tracey Josephson, Grants Administrator
Workplace Safety Consultation



The Department of Labor and Industry (DLI) announces continuation of its safety hazard abatement matching grant program under Minnesota Statutes §79.253, and Minnesota Rules 5203.0010-5203.0070.

Employers covered by workers' compensation insurance and those approved as self-insured employers are eligible to apply for a safety and health matching grant – of up to \$10,000 – to abate hazards in the workplace.

An on-site survey must have been conducted by one of the following:

- 1) MNOSHIA safety or health investigator;
- 2) DLI Workplace Safety Consultation (WSC) safety or health consultant;
- 3) in-house employee safety and health committee;
- 4) workers' compensation underwriter;
- 5) private safety and health consultant; or
- 6) person under contract with the Assigned Risk Plan.

The on-site safety survey must have resulted in specifically recommended safety practices or equipment designed to reduce the risk of injury to employees. Costs eligible for program participation are all or part of the cost of purchasing and installing recommended safety and health equipment, the cost of operating or maintaining safety and health equipment, and costs of purchasing or renting real property, if necessary, to meet criteria established by the on-site safety survey. Program development, training and education, and employee costs are not covered by this grant program.

– Safety grants continues on page 13

Workplace Safety Consultation Safety Grant activity - fiscal-year 2002

Number of grants	Project costs
private sector 175	employer match fund \$3,937,916
public sector 109	state match fund \$1,940,201
total 284	total \$5,878,117

From 1995 through 2002: **1,178 grants**
have been awarded, totaling **\$7.4 million.**

- Safety grants continued from page 9

Whether or not the grant application is approved in no way diminishes, delays or absolves the employer of any obligation to abate hazards as required by law. No state funds will be distributed until all grant documents are signed by all parties; funds expended before that must not rely on grant approval.

Grants are limited to a total maximum match of \$10,000 per project. The employer must provide at least \$1 in project costs for every dollar awarded. No grant will be awarded for more than half the amount of the approved project. Projects will be judged according to the criteria established by the statutes and rules.

Qualified projects having the greatest impact and feasibility will be given priority. Priority will also be given to projects meeting the requirements for grants in standard industrial classification (SIC) 201X, meat products; SIC 243X, millwork, veneer, plywood, and structural wood; SIC 33XX, primary metal industries; SIC 344X, fabricated structural metal products; SIC 37XX, transportation equipment; SIC 805X, nursing and personal care facilities; and SICs 15XX, 16XX, and 17XX, construction industries. These industries are the current focus of MNOSHA's strategic plan. Employers in SIC 2411, logging, will also be granted priority.

Grant applications will be accepted continuously, with grants awarded monthly. An employer that has received a grant for a particular worksite will not be eligible to receive another grant for that worksite for two years following the date of the original award.

Eligible applicants who seek assistance must submit their proposals to: James Collins, OSHA Management Team Director, Workplace Safety Consultation, Minnesota Department of Labor and Industry, 443 Lafayette Road N., St. Paul, MN 55155.

For further information or to request a grant application, contact WSC Grants Administrator Tracey Josephson by phone at (651) 284-5162 or 1-800-731-7232, or by e-mail at tracey.josephson@state.mn.us. Grant applications are also available on the DLI Web site at www.doli.state.mn.us/grants.html.

Equipment purchased, 2002

air exchange system
asbestos removal
BBP response kit
beds
Bobcat
boots
car hoist
chairs
chaps
chemical storage cabinets
chipper
crane
defibrillator
delimber
emergency stops
excavator
eyewashes
EZ lift
fall protection system
fault locator
feiler buncher
first aid kits
forklift
gas monitor
handrail system
harnesses
lanyards
machine guarding
manlift
nonslip flooring
pallet jack
safety glasses
sawhead
scaffolding
SCBAs
spray booth
sprinkler system
thermal imaging camera
trailer
trench box
turnout gear
vehicle lift
ventilation system
vests
whirlpool tub
winches
workstations