

An Employer's Guide to Developing A Workplace Accident and Injury Reduction (AWAIR) Program

This material can be provided in different formats (Braille, large print or audiotape) by calling the MNOSHA Training/Outreach Office at (651) 284-5050; toll-free at 1-877-470-OSHA (1-877-470-6742); or via TTY at (651) 297-4198.

Material contained in this publication is in the public domain and may be reproduced, fully or partially, without permission of the Minnesota Department of Labor and Industry or MNOSHA. Source credit is requested but not required.

For more information, contact:

Minnesota Department of Labor and Industry
Occupational Safety and Health Division
443 Lafayette Road N.
St. Paul, MN 55155-4307
(651) 284-5050
Toll-free: 1-877-470-OSHA (1-877-470-6742)
E-mail: OSHA.Compliance@state.mn.us
Web site: www.doli.state.mn.us

Table of contents

Section 1: Introduction.....	1
Section 2: Goals and objectives	3
Section 3: Roles and responsibilities	4
Section 4: Hazard identification, analysis and control.....	8
Section 5: Communication.....	11
Section 6: Accident investigation	13
Section 7: Enforcement of safety and health programs	15
Section 8: Program review.....	16
Section 9: Safety committees.....	19
Appendix A: Sources of information.....	20
Appendix B: MNOSHA area offices	22

Section 1: Introduction

In 1990, the state of Minnesota amended the Occupational Safety and Health Act, Minnesota Statutes Chapter 182, to require employers in certain industries to develop written, comprehensive workplace safety and health programs. This legislation, M.S. §182.653, subd. 8, is known as A Workplace Accident and Injury Reduction (AWAIR) Act and programs developed to comply with the act are known as AWAIR programs. The requirements of the act are as follows:

Work place programs – An employer covered by this section must establish a written workplace accident and injury reduction program that promotes safe and healthful working conditions and is based on clearly stated goals and objectives for meeting those goals. The program must describe:

- (1) how managers, supervisors and employees are responsible for implementing the program and how continued participation of management will be established, measured and maintained;*
- (2) the methods used to identify, analyze and control new or existing hazards, conditions and operations;*
- (3) how the plan will be communicated to all affected employees so that they are informed of work-related hazards and controls;*
- (4) how workplace accidents will be investigated and corrective action implemented; and*
- (5) how safe work practices and rules will be enforced.*

An employer must conduct and document a review of the workplace accident and injury reduction program at least annually and document how procedures set forth in the program are met.

The act also requires MNOSHA to adopt a list of North American Industry Classification System (NAICS) codes of employers that must create and maintain programs, and to update the list every two years. The current list can be found in Minnesota Rules §5208.1500 and is also available on the Minnesota Department of Labor and Industry Web site (www.doli.state.mn.us). The industries on the list are those with an illness and injury incidence rate or a lost-workday incidence rate (LWIR; also known as the severity rate) at or above the state average.

Normally, an employer's primary NAICS code, determined by the organization's main product service, dictates whether that employer is required to develop an AWAIR program. However, if an organization operates under more than one NAICS code at a single location, it should

consider creating a program if one or more of its secondary NAICS codes is listed, even if its primary NAICS is not.

There are several reasons why an organization should consider creating a comprehensive safety and health program for its establishment, even if it is not required to comply with the AWAIR Act. One reason is federal OSHA has documented a strong link between active safety and health programs and low rates of occupational injury and illness. Organizations with effective safety and health programs have significantly lower injury and illness rates than those that do not. Secondly, a comprehensive safety and health program can help an employer develop and organize all of the organization's specific programs, such as Employee Right-To-Know, respiratory protection, emergency action and response, etc. Finally, because the AWAIR NAICS code list changes every two years, an employer could be required to develop one in the future.

This booklet is intended to help employers create an AWAIR program specific to its operation. It is not a substitute for an AWAIR program, nor is it a sample program. Publications mentioned in this booklet are available on the federal OSHA Web site at www.osha.gov or on the Minnesota Department of Labor and Industry Web site at www.doli.state.mn.us.

Section 2: Goals and objectives

Central to AWAIR programs are the goals and objectives an organization sets for its overall safety and health program. Goals establish the direction for the program and state what the organization wants to achieve through the program. The best goals are generally challenging to reach or complete, but are also possible to achieve. They should be specific to the organization or facility. Objectives are the specific actions that will be taken to attempt to achieve the goals. The best objectives are those that can either be measured or demonstrated.

Ideally, safety and health programs should correspond with and become part of the organization's overall mission or business plan. Every employee should know what the goals of the organization's safety program are and how they are to be achieved.

Some examples of goals and objectives are:

Goal: We will reduce our injury and illness rate by 15 percent by 2010, using 2006 as the baseline.

Objectives:

1. We will address all employee safety issues in a timely manner, i.e., hazards that potentially pose an imminent danger of death or serious physical injury will be initially addressed within one shift and other hazards will be initially addressed within one week.
2. We will perform a monthly safety inspection of all departments and will take corrective action or begin investigating long-term solutions for all hazards identified during the inspection within one week.
3. We will investigate all accidents and near-miss events and will take corrective action within 24 hours to prevent a recurrence.

Goal: We will establish and maintain a company culture that is committed to workplace safety and health.

Objectives:

1. We will conduct regular safety meetings on a quarterly basis to inform employees about specific workplace safety and health issues, and to build an overall awareness of employee safety and health.
2. We will actively enforce all safety rules throughout the company.
3. Our facility will apply for MNSTAR status by the end of 2007.

Section 3: Roles and responsibilities

AWAIR programs must describe how everyone in the organization, whether management, first-line supervision or labor, is responsible for making the program work. These duties should be clearly laid out. Everyone in the organization should be able to explain what his or her role is in creating a safer, healthier workplace. Employees should feel they have some ownership and responsibility for creating a safe workplace. They should also be provided with the training, equipment, resources and assistance to carry out their roles. Employees and supervisors need to know where to go to get assistance to resolve issues of safety and health, and to get their concerns addressed and questions answered. Most importantly, they need to know how to correct safety and health hazards in the workplace as the hazards are identified.

Some examples of assigned responsibilities are:

For everyone in the organization –

All employees, including supervisors and managers, must follow all safety rules at all times.

For employees –

Employees must promptly report any safety and health hazards they observe to their supervisor or safety committee representative.

An employee's first priority is to perform each job task safely. If an employee is unsure how to perform the task safely, he or she must consult with their supervisor.

Employees must wear personal protective equipment as required for their protection and maintain the equipment in a sanitary manner.

Employees must report all accidents, including near misses, to their supervisor immediately upon occurrence.

For supervisors –

Supervisors must discuss any current safety issues with their employees at the beginning of all regularly scheduled staff meetings.

Supervisors should address all safety concerns raised by staff by initially investigating the issue, determining if the concern is valid and taking appropriate corrective action whenever necessary. Corrective action can include ordering new

equipment, issuing maintenance work orders or consulting with the safety director, the safety committee or upper management.

Immediately upon learning of an accident or near miss, the supervisor must initiate an investigation and submit the completed accident investigation report to the safety director.

Supervisors will actively and positively participate in all safety committee inspections of their assigned areas.

For safety directors –

The safety director will serve as the lead person in the organization for safety and health issues and will also serve as chairperson of the safety committee.

The safety director must review all accident investigation reports with the safety committee and take appropriate action to prevent recurrence.

The safety director will conduct, in cooperation with first-line supervision, all safety training required by regulation or identified by management, supervision or the safety committee as a need to assure a safe workplace.

The safety director will recommend improvements in physical plant, machinery, equipment, raw materials and personal protective equipment to management, supervision and the safety committee.

For safety committees –

The safety committee will conduct monthly meetings and area inspections to review accident reports, identify hazards and address any and all safety concerns raised by employees, first-line supervision or the safety director.

The safety committee will review the AWAIR program at least annually and make recommendations concerning updates and revisions to the program to senior management and the safety director.

Safety committee members each represent their particular work area and, therefore, should address all safety concerns brought to them by their coworkers. These concerns should be handled by initially investigating the issue with the area supervisor to determine if the concern is valid and then, as necessary and appropriate, bring the issue to the safety director or the full safety committee.

For management –

Managers will communicate to all employees and supervisors the importance of worker safety and health throughout the organization.

Management shall review all safety concerns brought forward by the safety director, the safety committee or first-line supervision and take appropriate action.

Top management shall review the AWAIR program and any recommended revisions from the safety committee at least annually, make the appropriate revisions and work with the safety director, the safety committee and first-line supervision to communicate the revisions throughout the organization.

Here are some questions to ask when evaluating the development and implementation of roles and responsibilities in a safety and health program:

Does everyone in the organization, whether a worker, a supervisor or a manager, know what their role is in the safety and health program and what their responsibilities are?

Do employees feel as if they personally are part of the safety program and are responsible for their safety and the safety of their coworkers?

Is everyone in the organization, including employees, supervision and management, actively involved in making the safety and health program effective?

Can employees, when asked, provide examples of how management has been involved in workplace safety and health?

Does management put the same value on worker safety and health as other organizational programs, such as product quality, on-time delivery, cost containment, etc.?

Does everyone, including management, follow all safety rules?

Do employees feel they are able to get their safety and health concerns addressed in a timely manner?

Are the employees able to get equipment, tools, machinery, ventilation, etc., repaired, serviced or replaced as soon as possible to protect their safety and health?

Are executives, managers and supervisors held accountable for workplace safety and health?

Are budget dollars made available to make repairs, replace equipment and upgrade the physical plant as needed to protect occupational safety and health?

Are staffing levels adequate to assist when needed with lifting heavy objects, providing sufficient breaks, etc.?

Management participation and commitment is crucial to the success of the AWAIR program. Management must not only establish the program and communicate it to everyone in the organization, but also provide the resources to improve safety and health throughout the entire organization. This includes providing employees and supervisors with the authority to identify and correct hazards, the budget to purchase new equipment or make repairs, the training necessary to work safely and to recognize hazards, and the systems to get repairs made, materials ordered and other improvements accomplished. Management also establishes the importance of the AWAIR program, both by the priority they give workplace safety and health issues and by the example they set by initiating safety and health improvements, correcting hazards, enforcing safety rules, rewarding excellent performance in safety and health, and by following all safety rules. Safety and health programs are similar to quality improvement and other efforts organizations engage in to continually improve performance, customer service, competitiveness, organizational culture, etc.

Section 4: Hazard identification, analysis and control

Another required facet of the AWAIR program is a discussion about what methods the organization plans to use to identify, analyze and control workplace hazards. This includes both hazards that currently exist in the workplace and those that may occur due to future changes, such as the introduction of new equipment, processes or materials, or the revision of existing procedures.

There are several methods organizations can use to identify hazards. Some rely solely on walkaround inspections by first-line supervisors, management or safety committees, others go through formal hazard analyses of different parts of the operation and some use a combination of methods. Regardless of the methods used, the best hazard identification methods combine expert opinion about safety and health hazards with input from either a cross-disciplinary team or at least one employee that works directly with the process or equipment in question. At least some of the individuals involved in hazard identification should be trained in hazard recognition. Inspections should be done on a regular basis to identify both newly developed hazards and those previously missed. Employers should also consider the value of periodic industrial hygiene monitoring and sampling for agents such as hazardous substances, noise and heat.

One of the more common tools used for hazard identification are checklists. Examples of checklists can be found in the *OSHA Handbook for Small Business* (OSHA 2209) and *A Workplace Accident and Injury Reduction (AWAIR) Program for Small Construction Employers*. Checklists can serve as a good starting point for organizations to assist employers and employees identify workplace hazards. Some checklists identify the most common hazards associated with a specific industry or process, while others cover a wide variety of workplaces.

One disadvantage of using a checklist is it focuses an inspection on certain specific hazards and can cause other hazards not on the checklist to go unnoticed. This is particularly true of generic checklists that are not site- or process-specific.

Another method often used to identify workplace hazards is job hazard analysis (JHA), also known as job safety analysis. Job hazard analysis is a step-by-step method of identifying the hazards associated with a particular task or job. It is important to involve the employee who normally performs the job in the development of the JHA. The steps for creating a JHA are as follows:

1. List all the job steps or tasks the worker must perform to complete the job. The list is created by watching the employee perform the operation in question, recording each step of the process and reviewing the list with the employee for completeness.

2. Review each step to determine what safety and health hazards are or could be present; these should be listed as well. Further observation may be necessary to assure all possible hazards are identified.
3. Determine what measures, if any, can eliminate or lessen the risk of injury or illness to the employee from the identified hazards. These measures can include: engineering controls, such as guarding or ventilation; work practices; administrative controls, such as job rotation; and personal protective equipment.

Federal OSHA has published *Job Hazard Analysis* (OSHA 3071), which provides a detailed description of JHAs and includes examples and a sample form.

A process hazard analysis (PHA) is generally a more complex procedure. Federal OSHA defines a PHA as “an organized and systematic effort to identify and analyze the significance of potential hazards associated with the processing or handling of highly hazardous chemicals.” Process hazard analyses are most commonly associated with the Process Safety Management of Highly Hazardous Chemicals (PSM) standards, 29 CFR 1910.119 and 1926.64. The PSM standard lists several methods an organization can use to perform a PHA. More information about PHAs can be found in *Job Hazard Analysis*, the PSM standard or in the federal OSHA booklet *Process Safety Management Guidelines for Compliance* (OSHA 3133).

Initial hazard assessments should be performed prior to the introduction of new raw materials, equipment or processes to the workplace, or before major changes are made to processes, equipment or the work environment. This is to assure that employees will be protected from potential safety and health hazards from the beginning.

Regardless of the technique used, all employees should know how to report workplace safety and health hazards to have them evaluated and corrected. Use of the reporting system should be encouraged by management. Employers need to respond to complaints in a timely fashion. The employees should be updated about the status of the complaint investigation and its outcome. The employees should also have the authority and ability to correct hazards themselves whenever feasible.

Some employers or safety committees feel there is benefit in having inspections or audits of a facility’s safety and health program by someone from outside of the organization. This person may have more specialized knowledge in the safety and health field than most of the organization’s safety committee members. He or she may have more sophisticated sampling or measurement equipment than the employer has readily available. An outsider may also recognize hazards the committee has overlooked. Sources for on-site help with occupational safety and health issues include consultants from MNOSHA Workplace Safety Consultation or private firms, insurance company loss-control representatives and occupational health practitioners, including the facility’s nursing staff.

After hazards are identified, they should be eliminated or abated to the degree that it is feasible. OSHA promotes a hierarchy of control measures. At the top of the hierarchy are engineering controls, which include tactics such as machine guarding, guardrails, ventilation and raw material substitution. All reasonably feasible engineering controls should be exhausted before other measures are taken. Work practices, another technique for employee protection, involves modifying tasks and jobs to reduce employee exposure to hazards. These include measures such as the use of water to keep airborne dust levels to a minimum or replacing lids on solvent degreasing tanks when not in use. Administrative controls, such as job rotation, are another tool employers sometimes use to reduce employee exposure. Personal protective equipment, such as respirators, gloves and safety glasses, should only be used as a last resort, after all feasible engineering and administrative controls and work practices have been implemented.

Employee input about abatement techniques is highly recommended. The employees may be able to provide insight regarding equipment and work procedures or have their own ideas about how to abate the hazards. They often are familiar with the history of the process and what measures have been tried in the past. Employees are also more likely to use the control measures and safe work practices if they feel some ownership in their establishment. Employee training may also be necessary, especially if new engineering controls or work practices are used.

Regular preventive maintenance of equipment is also important to prevent the occurrence of safety and health hazards. Examples of items that require regular inspection and maintenance include ladders, forklifts, hoists and slings, exhaust fans and belts, and pressure vessels. Some processing equipment may require a full mechanical integrity program with written inspection and testing procedures performed on a regular schedule. Proper housekeeping methods can also reduce health hazards by reducing airborne dust levels of hazardous substances, preventing the disturbance of asbestos-containing materials and improving overall indoor air quality.

Section 5: Communication

A written safety and health program is just words on paper if management and employees are not aware of it and understand it. Employees cannot follow safety rules, identify hazards, use correct work procedures or protective equipment, or work to achieve goals if they do not have the necessary knowledge to do so. Furthermore, if employees are afraid to discuss safety and health concerns with management or have no clear method of reporting their concerns to management, safety and health hazards can go undetected. Uncorrected hazards can adversely affect employee morale and productivity, even if an accident, injury or illness does not occur as a result.

While communication regarding safety and health issues should be a continual process, there are times when it is especially critical, including the beginning of an employee's new job assignment, whenever material, process or procedural changes are implemented, and whenever the employer notices deficiencies in safe work practices.

Communication can take several forms. One of the most commonly used methods is training; safety training should go beyond the minimum required by OSHA regulations, such as Employee Right-To-Know. Supervisors should receive at least as much safety and health training as their employees, if not more.

The design of a training segment should be based on clearly stated goals and objectives. The goals and objectives should reflect the knowledge and skills employees need to do their jobs safely and be as specific as possible. Training content should be directly applicable to the hazards, procedures and equipment the employees encounter on the job. Employees are more receptive to training if they see how they can apply the training to their work. Training content must cover emergency procedures as well as normal day-to-day activities.

Because individuals learn in different ways, a variety of training methods should be used to help communicate the material to be learned. Various training methods include lecture, video, class discussion, demonstrations, written exercises, small group exercises and hands-on exercises. Some trainers have even developed games to review material, especially in refresher training. There should also be some method to check for employee understanding of the course content to assure transfer of the training to the workplace. Methods often used include class discussion, written tests and quizzes, trainee demonstrations and on-the-job observation. More information about training design can be found in the federal OSHA booklet *Training Requirements in OSHA Standards and Training Guidelines* (OSHA 2254).

Not only should supervisors be required to attend training, they should be encouraged to reinforce the training in the workplace. Supervisors can observe and coach their employees by correcting unsafe work practices as they occur and positively reinforcing the use of safe work practices as well. Employees can be encouraged to work with each other to reinforce workplace safety. This is especially important when more experienced employees are working with new

ones. Senior employees should teach newer employees safe work practices rather than risky short cuts.

Other methods of communicating job safety and health information include posters, employee handbooks, handout materials, including one-page fact sheets or booklets, computer-based learning and safety promotional activities. If posters are used, they should have a clear message and be located in areas where employees are likely to see them, such as near the time clock or in the cafeteria. Relying on written materials only can be ineffective for several reasons. Many working adults lack basic reading skills. To avoid embarrassment and humiliation, they will often hide this from their supervisors and coworkers. Due to the growing diversity of Minnesota's workforce, many workers have limited English speaking and reading skills. It is also quite common for a person to set aside reading material "for later, when I have time," and never pick it up again. These problems can be at least partially addressed by having the employees complete worksheets or quizzes about the written material and submit them to their supervisor or the safety coordinator for grading. Increasing numbers of businesses are turning to computer-based learning as a training method. Computer-based learning can combine video, sound and text in an interactive format that can test employees for completion and understanding. Several standardized programs are available in this format and many employers are developing their own. Employers that use computer-based training packages should provide employees with the opportunity to contact someone with their specific questions that may not be covered in the program and with any specific instructions relevant to an employee's specific job assignment. Safety promotional activities, such as fairs, dinners and incentive programs, can also be an effective method of communicating the importance of workplace safety to employees. Employers must be careful, however, that incentive programs do not send the wrong message. For example, some programs based on the number or frequency of lost-time accidents have resulted in the underreporting of injuries by employees.

One of the strongest methods of communication is by example. Managers and supervisors must model their behavior for employees by working safely and following all safety and health rules.

Effective communication flows in two directions. Employees must feel free to discuss their safety concerns with their supervisors without fear of retaliation. They should know the proper procedures for reporting safety and health hazards in the workplace to get the hazards corrected or to get their questions answered. Supervisors should know who to contact for assistance in addressing safety issues and have the authority to take appropriate corrective action. Top management should work to make sure communication is occurring on all levels of the organization.

Section 6: Accident investigation

Accident investigation is a key component of a safety and health program. The goal of an accident investigation should be hazard identification and prevention. It should not be to affix blame.

All events that cause injuries or property damage should be examined. All near misses, those events where injury or property damage does not occur, but could have if conditions were different, should also be investigated. The incident investigation should be started as soon as possible. (For example, the PSM standard requires an investigation begin no later than 48 hours after the event.) Precautions should be taken to control any remaining hazards in the area before the investigation team enters.

Federal OSHA describes three cause levels for accidents. The first, direct causes, are the immediate causes of the injury, illness or damage. Direct causes are the hazardous material(s) or energy (e.g., electrical energy, potential energy or heat) that caused the injury or damage. Indirect causes are unsafe acts and conditions that caused the hazardous materials or energy to exceed safe limits. Basic causes are those that contribute to the creation of the indirect hazards. These can include poor management policies, personal factors or environmental factors.

Accident investigations should be a team effort, including supervision. At least one member of the team should be familiar with the process or equipment involved in the incident. Any contractors that were involved in the incident should also be represented on the team. Each investigator should have clearly defined tasks for which he or she is responsible. It is preferable the team members have training about accident investigation prior to an accident. The team members should also be briefed at the beginning of the investigation, including a description of the accident, the events leading up to it, a summary of normal operating procedures and conditions, and a list of witnesses.

After the team has been selected and briefed, the investigation should begin in an orderly fashion according to a predetermined procedure. The goal is to identify the causes of the accident and determine how to eliminate one or more of these causes to prevent another accident. Investigators need to ask questions, such as:

Who was involved in the event?

Who witnessed the event?

What happened?

What was abnormal or different before the accident occurred?

When did each event in the incident occur?

Where did the hazard first occur?

How and why did an event take place?

The investigation process should include accident site examination; witness interviews; documentation (including notes, maps, sketches and photographs); review of operating procedures, process information (such as flow charts, chemical properties, equipment diagrams and normal operating limits), maintenance records and job hazard analyses; and development of a sequence of events leading up to the accident. Each contributing factor should be traced back to its root cause. A written report that describes the accident, its causes and recommendations for corrective action and prevention should be prepared and presented to management.

Emergency response to the accident should also be reviewed. Among the factors to be considered are whether each employee responded to the emergency situation appropriately, whether first aid was administered to sick or injured employees in an adequate and timely manner, and whether the emergency response team's personal protective equipment and other necessary equipment was available in a usable condition for immediate use during the emergency. This evaluation should be a separate process performed by the emergency response team.

The ultimate goal of the investigation is to determine the basic and root causes, and to determine appropriate corrective action so the incident does not happen again. To simply attribute an accident to "employee error," without further consideration of the basic causes, deprives the organization of the opportunity to take real preventive action. Possible use of engineering controls, improved work practices and administrative controls should be considered to help employees do their jobs safely. Management practices should also be considered as a possible basic factor. If there is managerial or supervisory pressure to increase production or cut costs, employees may take unsafe shortcuts in work procedures or necessary preventive maintenance may be delayed or skipped.

Section 7: Enforcement of safety and health programs

Responsibility for safety and health exists at all levels in an organization. Managers, supervisors and employees should all know what their duties are to create a safe and healthful workplace and follow all safety rules. All employees must know and understand what they need to do and not to do to make the workplace safer for themselves and their coworkers. They must be trained on safe work practices and proper use of engineering controls and personal protective equipment. Employees should be coached to correct unsafe behavior and disciplined if violations continue. Safety procedures should become a key part of the daily routine.

Safety rules need to be enforced. Supervisors must monitor employees to assure engineering controls and personal protective equipment are correctly used and procedures are correctly followed. Supervisors should be trained to reinforce positive behavior, yet correct negative actions and attitudes. OSHA has long held the belief that safe work practices are not effective if their use is not enforced and, typically, holds the employer responsible if the organization does not enforce its own rules. This is sometimes difficult to do. Many supervisors do not like to discipline employees, especially if the employees are generally good workers. Others do not feel upper management backs them when they take disciplinary action against employees. Still others feel intimidated by an organization's grievance process. Upper management should support and encourage supervisor attempts to fairly and equally enforce rules. If workplace rules are not enforced, they cease to have meaning.

Enforcement of safe work practices should be fair, consistent throughout the organization and based on established policy. Management and supervision should be conscious of the examples they set for the workplace and should obey the same rules as the rest of the workforce.

Not only should negative behavior be discouraged, but positive behavior should be reinforced as well. Exceptional performance or efforts in workplace safety and health should be recognized by the organization.

Section 8: Program review

The AWAIR Act requires employers to review the entire program at least annually and document the findings. Program review is vital, because it serves as a check to see if the organization is making progress towards its goal of creating a safer, healthier workplace for all employees.

The second reason for conducting a review or audit of the workplace safety and health program is to determine whether the procedures used in the facility are consistent with those described in the program and if they are effective. For example, if the audit shows there are injuries and illnesses occurring from hazards that have not been identified or controlled through the methods described in the safety and health program, the auditor needs to determine if the methods are being used in the facility correctly and as described in the program. If the methods are not being used or are used incorrectly, the auditor needs to determine what barriers are present that prevent the correct application of the methods (e.g., production demands, supervisor work loads or lack of training). If the hazard identification and control techniques are being applied correctly, then the organization needs to further review the techniques and, perhaps, modify them or adopt new ones.

The primary focus of the evaluation effort should be whether the organization has made progress in achieving the AWAIR program's goals and objectives within the past year and, if so, whether the progress made actually improved worker safety and health. If an organization has achieved the goals and objectives described in its safety and health program, it should set new goals and objectives for the coming year to motivate managers and employees to work to further improve safety and health on the job. The organization, its management and its employees should continually work to improve workplace safety, just as they do to improve quality, cost effectiveness and other facets of the business.

If an organization is not meeting its objectives, especially the ones established specifically for the previous year, the organization needs to determine why. Perhaps the organization is improving and moving toward its goal, but just has not reached it yet. Time lines should be established or reestablished for each of the objectives and the overall goals. If progress is not being made or is being made too slowly, the goals and objectives need to be examined. It may be that the goals and objectives are not clear or measurable. Objectives should be clear, concise, and capable of being measured or demonstrated. It is also possible the objectives do not support the overall goal or goals of the program. This means meeting the objectives will not help the organization reach its goals or positively impact workplace safety and health conditions. New objectives should be created that act as steps toward achieving the greater goals. It may also indicate there are serious problems with the overall safety and health program that need to be addressed.

The first step in a program evaluation should be a review of the documentation created during the past year, relevant to the workplace safety and health program. One of the first documents that should be reviewed is the facility's *Log of Work-Related Injuries and Illnesses*, also known as the OSHA 300 log. The log and the accompanying *First Report of Injury* forms should be examined for trends, such as similar injuries to those workers with similar job duties, similar causes of injuries and illnesses, or departments with higher than average injury rates. Accident investigation reports should also be reviewed. If similar accidents or near misses continue to occur in the facility, perhaps the root causes of the events are not being determined during the investigation or corrective action is not being implemented. Reports from safety committee or supervisor inspections or walkarounds should be reviewed as well. If the hazards causing injury or illness in the workplace are not being identified through these inspections, then efforts should be made to assist the individuals to improve the process. Possibilities include additional training about hazard recognition, technical assistance from a MNOSHA workplace safety consultant, insurance loss-control specialist or private consultant, or the allotment of more time for more extensive or frequent inspections. Corrective actions resulting from hazards identified during accident investigations or routine inspections should be taken as soon as possible. Specific written programs, such as Employee Right-To-Know and Respiratory Protection, should also be reviewed for completeness and accuracy.

Employee and supervisor interviews are the next step. These can be formally conducted or simply a casual conversation as part of an inspection or walkaround. Employees should be selected at random. Contractor employees, if present, should be interviewed as well. Some of the questions that should be asked include:

What are some of the hazards involved with your job? How do you protect yourself from them?

Are written operating procedures correct? Do you follow them as written? Describe the safety precautions that you follow.

What are your responsibilities for workplace safety?

Do you know what the organization's goals are for workplace safety and health? What are they?

What are the chemicals that you work with? What are some of the possible health effects if you are overexposed to them?

Do you have any specific safety and health concerns? What are they?

Do you know how to report a safety hazard so that it can be corrected? How?

Are safety hazards corrected when you point them out to your supervisor or manager? If not, why not?

Do you know how to evacuate the area in case of fire or other emergency? What are your escape routes?

Do you know where to go to get replacements for worn or dirty personal protective equipment? Where?

How are safety rules enforced?

Simple observation by management can be an important evaluation tool. By walking around the facility, one can pick up clues about whether the safety and health program is working. Some items to check for include:

Are aisles and exits clear of boxes, raw material, refuse, etc.?

Are guards in place or have they been removed from the machines?

Are employees wearing the correct personal protective equipment?

Informal interviews with employees, in the form of casual conversation, can be conducted as part of these walkarounds.

After the evaluation process is completed, the AWAIR program and other safety and health programs should be updated to correct shortfalls, to assure the written programs reflect the real procedures used in the organization and to set new goals for the organization to achieve. Responsibility for making the changes to the program should be assigned to a specific person or persons and implementation or due dates should be assigned to assure the program is updated in a timely manner. Finally, changes to the program, goals and procedures need to be communicated to everyone in the organization.

While the law requires that AWAIR programs be reviewed at least annually, ideally the program should be continually referred to, reviewed and updated as necessary. This keeps the program fresh, accurate and an integral part of the organization.

Section 9: Safety committees

Minnesota Statutes §182.676 requires all employers with more than 25 employees “establish and administer a joint labor-management safety committee.” Employers with 25 or fewer employees that either have a lost-workday case incidence rate in the top 10 percent of all rates for employers in the same industry or have a workers' compensation pure premium rate as reported by the Workers' Compensation Rating Association in the top 25 percent of premium rates for all classes also must establish a committee. The statutory requirements for these committees are straightforward:

1. *The safety committee must hold regularly scheduled meetings unless otherwise provided in a collective bargaining agreement.*
2. *Employee safety committee members must be selected by employees.*

An active, trained safety committee can be an important tool for implementing an effective AWAIR program. Duties that safety committee members can assume include:

- ✓ participating in regular walkaround inspections;
- ✓ training new employees about safe working procedures;
- ✓ performing job hazard analyses (JHAs);
- ✓ providing input for the creation of workplace safety and health rules;
- ✓ presenting safety and health information at regularly scheduled staff meetings;
- ✓ assisting in accident investigations; and
- ✓ bringing employee safety and health concerns and complaints to supervision and management for correction.

Safety committee members should be able to perform their duties without fear of discrimination or retaliation by management.

MNOSHA Workplace Safety Consultation (WSC) offers assistance to employers and employees trying to establish joint labor-management safety committees. Contact WSC at the address and telephone number listed in Appendix B.

Appendix A: Sources of information

For more information about establishing AWAIR programs, MNOSHA suggests the following resources:

Minnesota Department of Labor and Industry, Occupational Safety and Health Division. (2000). *A workplace accident and injury reduction (AWAIR) program for small construction employers* [online]. Available Internet: <http://www.doli.state.mn.us/awaircon.html>. (Paper copies are also available from any MNOSHA area office.)

OSHA Process Safety Management of Highly Hazardous Chemicals Standard, 29 CFR §1910.119 (1999) [online]. Available Internet: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9760&p_text_version=FALSE.

OSHA Process Safety Management of Highly Hazardous Chemicals Standard, 29 CFR §1926.64 (1999) [online]. Available Internet: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10646&p_text_version=FALSE.

Safety and Health Program Management Guidelines; Issuance of Voluntary Guidelines, 54 Fed. Reg. 3904-3916 [online]. (1989). Available Internet: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FEDERAL_REGIS TER&p_id=12909&p_text_version=FALSE.

U.S. Department of Labor, Occupational Safety and Health Administration. (1996). Tools for a safety and health program assessment. In *Construction safety and health outreach program* [online]. Available Internet: <http://www.osha-slc.gov/doc/outreachtraining/htmlfiles/evaltool.html>.

U.S. Department of Labor, Occupational Safety and Health Administration. (2002). *Job hazard analysis* (OSHA 3071, Rev. ed.) [online]. Available Internet: <http://www.osha.gov/Publications/osha3071.pdf>.

U.S. Department of Labor, Occupational Safety and Health Administration, Office of Cooperative Programs. (1994). *Managing worker safety and health*. Washington, D.C.: Author. (Available from the MNOSHA St. Paul office only.)

U.S. Department of Labor, Occupational Safety and Health Administration. (1996). *OSHA handbook for small businesses* (OSHA 2209, Rev. ed.) [online]. Available Internet: <http://www.osha.gov/Publications/osha2209.pdf>.

U.S. Department of Labor, Occupational Safety and Health Administration. (2003). *Personal protective equipment* (OSHA 3151-12R) [online]. Available Internet: <http://www.osha.gov/Publications/osha3151.pdf>.

U.S. Department of Labor, Occupational Safety and Health Administration. (1994). *Process safety management guidelines for compliance* (OSHA 3133, Rep.) [online]. Available Internet: <http://www.osha.gov/Publications/osha3133.pdf>.

U.S. Department of Labor, Occupational Safety and Health Administration. (1998). *Small business outreach training program* [online]. Available Internet: <http://www.osha-slc.gov/SLTC/smallbusiness/index.html>.

U.S. Department of Labor, Occupational Safety and Health Administration. (1998). *Training requirements in OSHA standards and training guidelines* (OSHA 2254, Rev. ed.) [online]. Available Internet: <http://www.osha.gov/Publications/osha2254.pdf>.

Appendix B: MNOSHA area offices

MNOSHA Compliance (MNOSHA enforcement)

St. Paul Area Office

443 Lafayette Road N.
St. Paul, MN 55155-4307
Phone: (651) 284-5050
Toll-free: 1-877-470-OSHA (1-877-470-6742)
Fax: (651) 284-5741

Duluth Area Office

5 N. Third Ave. W., Suite 402
Duluth, MN 55802-1611
Phone: (218) 733-7830
Fax: (218) 725-7722

Mankato Area Office

Nichols Office Center, Suite 520
410 Jackson Street
Mankato, MN 56001
Phone: (507) 389-6507
Fax: (507) 389-2746

MNOSHA Workplace Safety Consultation

Minnesota Workplace Safety Consultation

443 Lafayette Road N.
St. Paul, MN 55155-4307
Phone: (651) 284-5060
Toll-free: 1-800-657-3776
Fax: (651) 284-5739