Landscape Industry Manual

Provided by the Integrity Loss Control Team

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Welcome to Integrity's Landscape Industry Manual

This Safety Manual is offered in a fill-able PDF format, allowing you to pick and choose any section you need and then personalize the fill-able forms within that section to transform this manual into a customized Safety Manual for your company. We recommend you save this document onto your hard drive before you begin to customize the Construction Safety Manual.

We realize that this large database of information may be more than you need. However, our Loss Control Team felt it is better to give you a full toolbox rather than bits and pieces. You never know when you may need additional information. If you have any questions regarding this Safety Manual, please contact:

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Introduction

Safety is of paramount importance for companies in our industry. It sets the tone for how we deal with our employees and how we interact with our customers, our suppliers, and the general public. Additionally, safety strongly correlates to profit. The high costs of an unsafe operation can quickly eat away at profitability in the form of increased workers' compensation, auto, and general liability insurance costs; reduced productivity; business disruptions; stiff government fines; and costly safety-related lawsuits. Publicity over even one serious employee injury or death can cost untold amounts in lost business. Today, good customers, general contractors, and others demand safe operations.

The Occupational Safety and Health Administration (OSHA) has identified landscape and horticultural services (which include professional lawn care, landscape construction and maintenance, tree care, and other plant care) as one of the highest hazard industries in the United States. Among the potential hazards that workers in our industry face are motor vehicle and other equipment accidents; ergonomic injuries, such as back strains; exposure to noise, heat, cold, chemicals, and insects; amputations; slips, trips and falls; eye injuries; and electrocutions.

The vast majority of these often costly and painful employee injuries can be prevented, but it's critical that safety start with top management and that you have a *written and implemented* safety program. Integrity Mutual Insurance Company has developed this safety program to assist green industry companies in reducing hazards and injuries. Our purpose is to give you a ready-to-use, practical safety program that you can either adopt as your own or customize to meet the specific needs of your operation. This program will assist you in identifying potential hazards so that you can provide a safe, healthful environment for your employees.

This file includes management safety statements, a company safety policy, checklists, forms, and resources for additional information. It's important that you review your own company's safety needs, then, if necessary, modify this program to meet those needs.

Your time is valuable. We don't want you to spend it dealing with preventable employee injuries; increased workers' compensation, auto, and general liability claims; government investigators; or safety-related lawsuits. Instead, we encourage you to use this safety program as a continuous guide in your efforts toward an even safer operation — and at the same time, assist in moving the entire green industry toward safety excellence.

Section 1:

Management Safety Statement

Safety Policy for

Safety Policy Statement

Management at _____ is committed to providing a safe, healthy environment free from recognized hazards for all of our employees, customers, vendors, and other visitors. We recognize that safety must start at the top and must involve **all** of our employees, whether on company property, on the road, or on a job site. Only in this way will we help prevent accidents that can result in painful injuries, permanent disabilities, or even death.

As part of our commitment to safety excellence, _____ participates in the PLANET/STARS Safety Program for the green industry. We regularly discuss safety issues with our employees, provide safety awareness training, and conduct hazard audits of our own operation(s). We have established an active safety committee and have developed safety rules, policies, and procedures that must be followed. Failure to follow these rules and procedures may result in disciplinary action, up to and including termination.

Our company promptly and thoroughly investigates all accidents, on-the-job injuries or illnesses, and “near miss” incidents, and acts on hazards or potential hazards that come to our attention. All employees are required to report any accidents, on-the-job injuries or illnesses, or “near misses” to their supervisor or another manager as soon as possible. We also require prompt reporting of hazards and potential hazards and encourage employees to share their safety suggestions and concerns with us in order to ensure a safe workplace for everyone.

Safety saves time, money, and lives.

_____

(Print or type name/title of company owner/operator)

_____ _____

(Signature of owner/operator) (Date)

Declaración De La Política De Seguridad

_____

Declaración de la Política de Seguridad

La gerencia de _____ se compromete a brindar a su personal, un medio ambiente laboral seguro y saludable, libre de peligros ya conocidos por todos nuestros empleados, clientes, proveedores y otros visitantes. Reconocemos que la seguridad debe ser nuestra primera prioridad y que en ella deben participar TODOS nuestros empleados, independientemente de que se encuentren en instalaciones propiedad de nuestra compañía, en la vía, o en el lugar donde se lleva a cabo una obra. Sólo así podremos ayudar a evitar accidentes que pueden tener como consecuencias lesiones dolorosas, discapacidades permanentes, o incluso la muerte.

Como parte de nuestro compromiso en alcanzar la excelencia en cuanto a seguridad se refiere, _____ participa en el Programa de Seguridad Empresarial de PLANET/STARS dirigido a la industria de la jardinería y el paisajismo. A menudo discutimos temas de seguridad con nuestros empleados, les ofrecemos entrenamientos de concientización en seguridad y llevamos a cabo auditorias de peligros en nuestro(s) propio(s) sistema(s) operativo(s). Hemos establecido un activo comité de seguridad y hemos desarrollado normas de seguridad, políticas y procedimientos que deben ser cumplidos por todo el personal. El incumplimiento de estas normas y procedimientos puede acarrear acciones disciplinarias e incluso incluir el despido.

Nuestra compañía investiga de manera expedita y exhaustiva todos los accidentes, lesiones o enfermedades sufridas en el lugar de trabajo, así como los incidentes que estuvieron “a punto de ocurrir”, a la vez que toma acciones respecto a los peligros o peligros potenciales que sean presentados a nuestra atención. A todos los empleados se les exige informar con prontitud a sus supervisores u otro gerente de cualquier tipo de accidentes, lesiones o enfermedades sufridas en el lugar de trabajo o que estuvieron “a punto de ocurrir.” También, requerimos información expedita de peligros o peligros potenciales y hacemos un llamado a nuestros empleados a compartir con nosotros sus sugerencias o preocupaciones relativas a la seguridad, para garantizar así un medio ambiente laboral seguro para todos nosotros.

La seguridad salva vida y ahorra tiempo y dinero.

_____

(Nombre y cargo en letra de imprenta o mecanografiado)

_____ _____

(Firma del propietario/gerente) (Fecha)

Section 2:

Key Safety Elements

The checklists found in Section 5 of this manual are designed to be used as a guide to assist you in building a strong safety program. We encourage you to check off the items that your company now has in place, then carefully review Sections 3, 4, and 5 of this *Safety Program for Green Industry Companies* for additional assistance. Do not be concerned if your company does not yet have all of the items on the following checklist in place. This program provides tools that can help you.

For example, one checklist item is having an active safety committee. Section 3 of this program includes a section on safety committees, which provides sample wording that you can use within your company's overall safety policy. This wording includes the suggested make-up of a safety committee, details how often the committee should meet, and lists suggested committee responsibilities. Note that these are only suggestions.

It is important that you modify the wording in Section 3 to meet your company's specific needs. After you have reviewed the information on safety committees in Section 3 of this program, you can then look at Section 4, where you will find still more helpful information, including an Effective Safety Committee Checklist.

Section 5 of this program also includes a form for taking minutes at safety committee meetings. The safety committee item is just one suggestion for elements needed in creating a proactive safety program. We encourage you to make use of the tools provided throughout our *Safety Program for Landscape Industry Companies*.

Section 3:

Company Safety Policy

Safety and Health Policy

The personal safety and health of each employee of this company is of primary importance. The prevention of occupationally-induced injuries and illnesses is of such consequences that it will be given precedence over operating productivity whenever necessary. To the greatest degree possible, management will provide all mechanical and physical facilities required for personal safety and health in keeping with the highest standards.

We will maintain a safety and health program conforming with the best practices of organizations of this type. To be successful, such a program must embody the proper attitudes toward injury and illness prevention on the part of both supervisors and employees. It also requires cooperation on all safety and health matters, not only between supervisor and employee, but also between each employee and his fellow workers. Only through such a cooperative effort can a safety record in the best interest of all be established and preserved.

Our objective is a safety and health program that will reduce disabling injuries and illnesses and minimize vehicle accidents and casualty and property damage accidents - not merely in keeping with, but surpassing, the best experience of other operations similar to ours.

Our safety and health program will include:

1. Providing mechanical and physical safeguards to the maximum extent that is possible;
2. Conducting a program of safety and health inspections to find and eliminate unsafe working conditions or practices; to control health hazards; and to comply fully with safety and health standards for every job;
3. Training all employees in good safety and health practices;
4. Providing necessary personal protective equipment and instructions for its use and care;
5. Developing and enforcing safety and health rules; requiring that employees cooperate with these rules as a condition of employment; and
6. Investigating, promptly and thoroughly, every accident to find out what caused it and to correct the problem so that it won't happen again.

We also recognize that the responsibilities for a successful safety and health program are shared:

1. The employer is responsible, and accepts the responsibility, for leadership of the safety and health program, for its effectiveness and improvement, and for providing the safeguards required to ensure safe conditions;
2. Supervisors are responsible for developing the proper attitudes toward safety and health in themselves and in those they supervise; and for ensuring that all operations are performed with the utmost regard for the safety and health of all personnel involved, including themselves; and
3. Employees are responsible for wholehearted, genuine cooperation with all aspects of the safety and health program, including compliance with all rules and regulations and for continuous safe job performance.

_____

(*Name of Company*)

Key Aspects of Successful and Low Accident Rate Companies

- Management shows a greater commitment to safety.
- All managers show a great involvement in safety.
- Low accident rate companies have a higher financial stability.
- Low accident rate companies have more extensive and comprehensive employee relations programs.
- Low accident rate companies have more sophisticated means of selecting new employees and screening employees for advancement.
- Managers of low accident rate companies have greater interaction with employees on a one to one basis.
- Low accident rate companies have more severe levels of discipline.
- Low accident rate companies display much better housekeeping and cleanliness.
- Low accident rate companies more often use lead workers to train new employees.
- Low accident rate companies have more formal hazard inspection procedures.
- Low accident rate companies often provide comfortable break and lunch facilities for their employees.
- Management in the low accident rate companies have a greater empathy with their employees.
- Low accident rate companies are characterized by strong and enforced corporate safety policies and thorough accident investigation procedures that help prevent similar accident recurrence.

Safety Responsibilities

All of us at _____ have a key role in ensuring a safe working environment for our employees, customers, suppliers, and the general public. We are each responsible for the following:

Management

Management's most important safety responsibility is to lead by example and set the tone for a safe working environment throughout our company. Management's responsibilities also include:

- Making a full commitment to safety that starts at the top
- Communicating our company's commitment to safety in a way that encourages all to share this commitment
- Establishing safety policies and procedures and ensuring that they are implemented
- Providing monetary and other support for our safety program
- Appointing a safety "champion" to lead our safety program
- Ensuring that all company safety rules are strictly enforced
- Complying with OSHA and other regulatory requirements
- Ensuring that supervisors are properly trained and are held accountable for their safety responsibilities
- Ensuring that all employees are trained in a language and manner that they understand
- Taking prompt corrective action on hazards and potential hazards and empowering others to take action
- Initiating prompt accident investigation, documentation, and follow-up, including follow-up on "near miss" incidents
- Regularly reviewing all accidents, on-the-job injuries or illnesses, and near miss incidents with supervisors and other employees
- Regularly evaluating the effectiveness of our safety program and making changes when needed
- Promoting our company as a safe company to customers and the public

Supervisors

Our supervisors (crew leaders and other supervisors) are a critical link between management and our non-supervisory employees. Our supervisors' safety responsibilities include:

- Supporting and communicating our company's commitment to safety
- Reviewing and understanding company safety policies and procedures
- Enforcing all safety rules in a fair, consistent manner
- Providing appropriate safety training to employees in a language that they understand *before* they begin their duties
- Ensuring that employees are properly trained and certified *before* operating vehicles or equipment
- Documenting (in writing) attendance at all safety meetings
- Regularly inspecting vehicles, equipment, and job sites to identify potential unsafe conditions and work practices
- Ensuring that workers use appropriate PPE as required
- Promptly investigating and recording all accidents, on-the-job injuries or illnesses, near misses, and reports of hazards
- Ensuring that all injuries receive prompt and appropriate medical attention
- Documenting in writing all disciplinary actions taken against employees who violate safety rules
- Ensuring that tools, equipment, vehicles, facilities, and job-site work areas are safely secured during non-use periods

Safety Responsibilities continued:

All Employees

- All of our employees are responsible for:
- Complying with all company safety rules and policies
- Working *safely* at all times and encouraging coworkers to do the same
- Always using PPE as required
- Promptly reporting any hazards or potential hazards to their supervisor or another manager
- Promptly reporting any accidents, on-the-job injuries or illnesses, or near miss incidents
- Participating in safety training sessions and safety meetings
- Complying with all hazard warning signs
- Keeping safety guards and shields in place and not operating equipment if safety devices have been removed or disabled
- Conducting pre-trip and post-trip vehicle/equipment inspections
- Maintaining vehicles and equipment in good working condition
- Operating vehicles and equipment in a safe manner — and only after being properly trained
- Practicing good housekeeping to reduce the risk of injury to others
- Making suggestions to management about how our company could be safer

Safety Rules

We are committed to maintaining a safe working environment and to reducing the risk of injury to our employees, customers, suppliers, and the general public. In an effort to do that, *<your company's name>* has established the following safety rules, which *all* employees must follow. This list of rules is provided for convenience and is not intended to cover all aspects of safety conduct and behavior. Disregard for our company's safety rules is grounds for disciplinary action, including possible termination.

If you are injured while working, notify your crew leader or other supervisor. He/she will see to it that you receive proper first aid and medical attention. Your supervisor will ensure that records are kept.

All injuries, no matter how minor, must be reported so that they do not become more complicated or infected.

All employees must abide by the following requirements.

Before starting a job:

- Inspect work areas, equipment, and job sites for hazards before starting your work each day. Immediately report any unsafe conditions to your supervisor or another manager so that corrections can be made before you start work.
- Understand when hand signals are required. Make sure you thoroughly understand the signals before beginning a job. When in doubt, ask. Only one person at a time can give hand signals, and that person must be in a position to have a clear, unobstructed view.
- Do not work underneath or over others without first notifying them and ensuring proper safeguards are in place.

Dress

- Dress according to our job standards. This includes: long pants and long-sleeved shirts; socks; boots or shoes (depending on the activity) with sturdy, non-slip soles (steel-toed boots for landscape construction and maintenance work); chemical-protection clothing and footwear when handling chemicals; and a hat for sun protection during the hot summer months. Tennis shoes, sandals, and other lightweight shoes are not allowed at any time.
- Do not wear jewelry, drawstrings, or loose or frayed clothing when operating or working near powered machinery or equipment. Tie long hair back.
- Know that hard hats *must* be worn around all building construction and wherever a potential overhead hazard exists.
- Wear a safety vest where work zones include traffic.

Safety Responsibilities continued:

General

- Think *safety* at all times. Do not distract coworkers or engage in roughhousing, horseplay, fights, or similar activities that increase the chances of an accident.
- Do not take shortcuts and do not run.
- Do not allow children on job sites.
- Promptly report all accidents, on-the-job injuries or illnesses, and near miss incidents to your supervisor or another manager. Know the location of first-aid kits and who and how to call for emergency medical help.
- Always use appropriate fall protection if you are not working at ground level.
- Ensure that all loads are covered with a tarp and secured, and that the truck can handle the weight of the load.
- Report wet conditions on hills or other slopes to your supervisor for an evaluation before mowing.
- Follow our company's no smoking signs and other signage warning of potential hazards. Never smoke in fueling areas.
- Only use chemicals if you have been properly trained in their use. Store chemicals in their original container and in their proper locked location. Do not eat, drink, or smoke when handling chemicals or when working in areas where chemicals are stored.
- Know that our company has a drug-/alcohol-free workplace policy.
- Do not bring weapons of any kind onto our property, into company vehicles, or onto job sites.
- Lift correctly to avoid sprains, strains, and back injuries. Always lift within your limits and never lift or move an object that weighs 50 pounds or more by yourself. Seek assistance from a coworker for heavy loads. You also must comply with our company's stretching program standards.
- Practice good housekeeping at all times. Keep your work area and job sites free of objects and debris that could be tripping hazards. Do not allow oil, water, or other substances to remain on floors so they become slip hazards. Return all tools and equipment to their proper location at the end of the day.
- Follow our company's procedures in the event of an emergency. Become familiar with the location of fire extinguishers, emergency exits, and so on. Know how to call for outside emergency help. Do not block exits, fire doors, fire extinguishers, gas meters, or electrical panels at any time.
- Always use the PPE — safety glasses, goggles, earplugs, gloves, hard hats, etc. — that has been assigned for the particular task. If your PPE does not fit properly, immediately tell your supervisor so that it can be replaced.

Equipment

- Do not remove or disable guards, shields, or other safety devices unless you have been authorized to do so. Never bypass a safety device.
- Promptly report any missing or damaged safety devices to your supervisor. Do not operate equipment with missing or defective safety devices until they have been replaced.
- Only repair equipment if you are authorized to repair it. Ensure that our company's written lockout/Tagout procedures are followed before any cleaning, adjustments, or repairs begin.
- *Only* operate vehicles and equipment after you have been trained. Use seat belts unless you are on equipment (such as a zero-turn mower) with a rollbar that is in the folded down position. If you must fold down a rollbar, return it to its upright and locked position as soon as possible.
- Know that the personal use of company vehicles or equipment requires prior written approval.
- Never ride or let a passenger ride in the bed of a truck, in the bucket of a skid-steer loader, or on the forks of a lift truck.
- Do not allow passengers on any equipment and do not allow unauthorized persons (non-company employees, relatives, friends, etc.) to operate company vehicles or equipment.
- Turn off vehicles and equipment when they are not in use. Take the keys with you. Do not leave equipment unattended.
- Never stand between two pieces of equipment or under any hoisted equipment or material.
- Do not use a cell phone when operating vehicles or equipment unless it is an emergency and you cannot safely stop to call for emergency help. Also, do not engage in other unsafe activities (such as taking notes, reading maps, etc.) when operating vehicles or equipment.
- Use cones, barricades, and other warning devices provided when working in traffic areas. Do not park vehicles or equipment where they are likely to get

Motor Vehicle Safety

Motor vehicle accidents are a major concern to _____ in large part due to the amount of time that employees spend on the road. Vehicle accidents can cause serious injury or death, resulting in increased insurance and business disruption costs. Most of these accidents are due to driver error or poor operating practices, both of which can be controlled.

These concerns, in addition to our concern for employee and public safety, have resulted in the creation of our company's Motor Vehicle Safety Program. Our motor vehicle safety policies include, but are not limited to, the requirement that all employees who drive company vehicles:

1. hold valid driver's licenses from the state(s) in which they will be driving and are fully insurable;
2. *immediately* notify a supervisor if their license is suspended;
3. undergo hands-on training and pass a road test *before* being allowed to drive;
4. hold a valid commercial driver's license (CDL) and meet all CDL requirements in order to drive large trucks that require CDLs; and
5. undergo hands-on training before being authorized to pull a trailer or otherwise haul a load.

Our company requires drivers to have at least three years of driving experience. If a driver under the age of 21 is accepted, he or she must have a clean motor vehicle record and driving history. An excessive number of incidents (tickets and accidents) and/or any major violations (such as driving with a suspended license, careless driving, or drug or alcohol violations) at any age are unacceptable.

Our policies also require any employee using a personal vehicle for regular company business to provide proof of insurance. In addition, we require all prospective drivers to sign a Motor Vehicle Report Release Form so that we can check their driving records and submit to a drug/alcohol test following *any* motor vehicle accident. Our insurance company makes the final decision for driver acceptance.

Our drivers have the following additional responsibilities

- Know and comply with all local and state traffic regulations.
- Become familiar with the operation of the vehicle that is assigned to you. Know what it can and cannot do. If you don't feel safe driving, let someone else who has been pre-approved to drive company vehicles take over.
- Keep your vehicle mechanically sound. Report deficiencies to your supervisor.
- Comply with our company's cell phone use policy (no use of cell phones when driving, except in an emergency if you are unable to safely stop).
- Keep windshields and mirrors clean at all times.
- Visually check your vehicle, trailer, and load prior to driving. Inspect your vehicle each day, both before departing and after your trip. Document your findings.
- Make sure all loads are secure and are covered with a tarp if necessary and that the trailer tongue weight is correct.
- Make sure that trailers don't have any rocks or debris that could fall off while driving.
- Know your vehicle's weight capacity. Never haul a load heavier than the truck can handle.
- Have the right attitude. Be considerate and use common sense in protecting and respecting the rights of other drivers and pedestrians. Control your temper and be patient.
- Always drive defensively to avoid an accident.
- Adapt vehicle speed to weather, road conditions, traffic, and visibility, and never exceed posted speed limits.
- Allow at least one truck or truck-and-trailer length of space for each 50 miles of speed between you and the vehicle ahead.
- Avoid sudden stops to keep from being hit from the rear.
- Stop for school buses, then proceed at a safe speed. Comply with local school bus traffic laws.
- Give correct signals far enough in advance to be seen.
- Avoid making U-turns.
- Avoid parking on hills unless absolutely necessary. When you must, put the vehicle in the opposing gear, apply emergency brakes, contact the curb with the front wheels turned in if headed downhill (turned out if headed uphill), and put a chock on the downgrade wheel.

Safety Responsibilities continued:

- If mechanical trouble develops and you must stop on the side of the road, immediately put out flares or other warning devices in accordance with regulations.
- When possible, exit the vehicle from the curbside while on public ways.
- *Promptly report all accidents.* You will be given instructions if an accident occurs.
- Keep your vehicle clean and be a courteous driver. Remember that <*your company's name*>*'s* image is presented each time you drive a company vehicle.

Safety Committee

_____ has established a safety committee with the objective of ensuring a safe working environment for all employees. The committee includes representatives from all areas of our company. Formal positions include: chairperson, an identified "safety champion," who serves a two-year term; vice-chairperson, a safety champion, who is in training to become the next chairperson; and secretary, who assists the committee in preparing agendas and taking minutes at all committee meetings. Safety committee meetings are held monthly.

The committee monitors loss trends and insurance reports, identifies risks, establishes company-wide annual goals and objectives aimed at reducing hazards and injuries, and reviews all accidents, on-the-job injury or illness, and "near miss" reports with the involved employee(s), then suggests actions to prevent recurrence. Additionally, the committee conducts job-site and facility safety inspections/audits, recommends changes to our company safety policies, conducts safety orientation for new employees, reviews and acts on employees' safety suggestions, identifies needed safety training and implements training programs, and prepares an annual safety improvement plan for our company.

The committee also fills out and posts all required OSHA reporting forms and enters our company in local and national safety recognition and award programs.

Safety Orientation

<*Your company's name*> requires all newly hired employees to participate in a safety orientation before beginning their duties. The safety committee conducts a safety orientation in a language and manner that the new employee understands. Safety orientations include:

- Sharing _____*'s* vision and commitment to safety
- Presentation of our company's safety achievements and awards
- Complete review of _____*'s* safety policies and procedures
- Instructions on how to report hazards, potential hazards, accidents, on-the-job injuries or illnesses, near miss incidents, and safety suggestions
- Inspection of all vehicles and equipment and a review of the new employee pre-approval (certification) requirement prior to operation
- Demonstration of all PPE to which the employee will be assigned
- A tour of our buildings and grounds to familiarize the new employee with all safety equipment, signage, and other items (fire extinguishers, the location of emergency exits, etc.) that may be needed during an emergency

Safety Training

_____ requires that our employees successfully complete "hands-on" training on all vehicles or equipment that they will be operating before they are allowed to operate it. We also provide the following mandatory training: hazard communication training and all other OSHA-required training; weekly "tailgate" safety training; refresher training for supervisors and other long-term employees; training on the importance and use of PPE; and on-site hazard awareness training at job sites to which employees are assigned.

Supervisors are responsible for regular on-the-job safety awareness and training for their crews. Our policy is to train our employees in a language and manner that they understand and to document in writing attendance at all safety training sessions.

Enforcement of Safety Policies

_____ strictly enforces all safety policies and procedures and holds supervisors and other managers accountable for fairly and consistently enforcing company safety rules. Employees who violate company safety policies will be subject to discipline, up to and including possible termination.

Supervisors must provide management with written documentation of all disciplinary actions (including verbal warnings) taken against employees who violate company safety rules. Supervisors will be subject to disciplinary action or dismissal for the following:

- Failure to control unsafe conditions or work practices
- Failure to provide adequate training prior to job assignment or vehicle or equipment operation
- Failure to enforce the use of required PPE
- Repeated safety rule violations by the employees they supervise
- Failure to report accidents or provide appropriate medical attention to employees injured at work

Drug-/Alcohol-Free Workplace

Substance abuse is a costly issue that impacts the safety and well-being of all of our employees. _____ is committed to maintaining a drug-/alcohol-free workplace by:

- Prohibiting the use, possession, manufacture, purchase, sale, or distribution of alcohol, narcotics, other illegal or unauthorized drugs, “look alike” or simulated drugs, or drug-related paraphernalia on our property, on jobsites, and in company equipment or vehicles at any time
- Prohibiting employees from reporting to work with the presence of alcohol or other illegal or unauthorized drugs in their systems
- Prohibiting employees from reporting to duty under the influence of any legally prescribed drug or medication that will adversely affect their working ability, alertness, response, or coordination, or jeopardize the safety of others
- Requiring employees using legally prescribed drugs to report such use to their supervisor so it can be determined whether the drug produces side effects that could be hazardous to their job performance
- Our drug-/alcohol-free workplace policy also authorizes our company to test job applicants and employees for the presence of drugs or alcohol in their systems at any time, in accordance with state and federal laws. Employee drug/alcohol testing may include random testing, post-accident testing, “reasonable suspicion” testing, or testing upon return to duty after a leave of absence.

Workplace Violence

_____ is committed to providing a safe, secure working environment for our employees, customers, vendors, and other visitors. We strictly prohibit guns or weapons of any kind from being brought onto our property or job sites, or from being carried in company equipment or vehicles. We reserve the right to conduct unannounced searches for weapons in accordance with the law.

Additionally, our company strictly prohibits violent acts or threats of violence, including fights, intimidating or threatening behaviors, vandalism, arson, sabotage, and physical or sexual abuse. We require all employees to immediately report any violent acts or threats of violence to management so that they can be thoroughly investigated. Retaliation against employees who report violent acts or threats of violence is strictly prohibited.

Emergency Response

_____ has a written emergency response plan that complies with federal, state, and local requirements. We have identified an emergency response coordinator and an alternate, and we provide regular training to our employees (including unannounced drills) on evacuation and shelter procedures and locations during emergencies.

We have posted emergency phone numbers throughout the company and have trained employees on the location of emergency exits, fire extinguishers, and other equipment that may be needed in an emergency. We have prepared an evacuation map for each of our facilities and a site map of our property, which includes such information as the location of gas and water lines and the location of chemical and fuel storage areas. These maps are posted in areas where employees can see them, and copies have been provided to local emergency responders.

We regularly inspect all emergency equipment, entrances, and exits and have trained our employees how to call for outside help during an emergency. Our policy is that protecting human life comes *first* during an emergency.

Accident Reporting/Investigation

_____ requires our employees to promptly report all accidents, including property damage accidents, and all near misses to their supervisor or another manager. Reporting near miss accidents is important in preventing possible future injury to one of our workers. Our company promptly investigates all reports of accidents and near misses and requires supervisors or other managers involved in such investigations to complete an accident investigation report.

We have specific written procedures that those involved in vehicle accidents must follow; copies of these instructions are located in the glove compartment of each company vehicle. We also have developed a form providing written guidance for our telephone operators or other persons who receive the initial report of an accident.

Our company reviews all accidents and near miss accidents with the affected employee, his or her supervisor, and other managers and employees in an effort to prevent recurrence. We also promptly report accidents likely to result in lost workdays to our workers' compensation carrier. In the case of any accident, our highest priority is the lives of those involved.

Our specific procedures for all employees involved in a vehicle accident are as follows:

- Stay calm. Get in control of yourself and the situation.
- Call 911 for police or professional emergency medical help if needed.
- Direct traffic with flairs, cones, or reflectors, as appropriate.
- Attend to all injured persons. Start with the most seriously injured person first.
- Do not move the injured person unless he or she is in danger from fire, other vehicles, etc.
- Call the office to report the accident and get instructions.
- Do not move the vehicles.
- Exchange driver's license and vehicle information.
- Conduct your own investigation. Get names, addresses, vehicle license numbers, and insurance information from all those involved; get the year, make, and model of all vehicles involved. Offer the same information to others who were involved.
- Do not admit fault and do not discuss the accident with anyone except the office or police.

First-Aid Policy

_____ does all that is reasonable to assure that the best, appropriate, authorized care is provided for work-related injuries and illnesses. We provide first-aid kits in various locations throughout the company for our employees' use and train employees on the location of these kits and their contents. First-aid kits are also provided in all company vehicles and must be kept fully stocked.

Our first-aid policy includes:

- Training employees in the safe handling of blood and other body fluids
- Providing protective equipment, including latex and vinyl gloves
- Publicizing to all employees the names and emergency phone numbers of employees who have been trained in first aid and CPR
- Training employees in how to call for outside professional emergency medical help
- Requiring employees to promptly report all work-related illnesses and injuries, no matter how minor
- We also require our supervisors to make sure prompt medical attention is given to all work-related injuries and illnesses.

Return-to-Work/Modified Duty

_____ has a return-to-work/modified duty program that is aimed at getting employees to return to work as soon as is medically possible after sustaining work-related injuries or illnesses. Return-to-work programs are an important tool to help control workers' compensation claim costs, and they demonstrate to injured and ill employees that we care and are interested in their well-being.

We have identified certain modified duty tasks that may be appropriate for some injured employees, but it is important to work on a case-by-case basis with the injured/ill employee, our insurer, and a local medical provider to match the employee's restrictions to the job task. All modified duty jobs are temporary in nature. We require employees to promptly report any work-related injury or illness to their supervisor, and the company promptly reports these incidents to our workers' compensation carrier. Employees must provide a doctor's release to full duty *before* returning to regular duties.

Buildings and Grounds

We require our employees to take steps to eliminate potential hazards and to work in a safe manner throughout the company — including in our offices, the garage, and our shop — as well as on our grounds. We have posted speed limits in our equipment yard and in parking lots and have clearly marked parking areas. Special care must be taken when backing up vehicles or equipment in the yard and lots. We prohibit unauthorized persons from parking in equipment areas.

Supervisors must ensure that buildings are kept free of hazards and that daily hazard inspections are conducted in the garage and shop. All employees, including office workers, are required to participate in weekly tailgate training and to practice good housekeeping at all times. Good housekeeping practices include keeping floors free of debris and other tripping hazards, keeping aisles clear, promptly cleaning up spills, and keeping individual work areas free of hazards.

We strictly prohibit smoking in our shop and garage and prohibit any unauthorized persons in either area. We have placed multipurpose fire extinguishers throughout our company. These extinguishers are visually inspected once a month and receive an annual maintenance check. We also have set aside a special welding area in our shop; this welding area has a welding curtain, is adequately ventilated, and is located away from flammable materials.

Safety Responsibilities continued:

Job Site Safety

Safety at job sites is critically important for our employees, our customers, and the general public. We require job site supervisors to conduct brief daily hazard awareness training and to ensure that each job site has been checked for any unsafe conditions before work begins. Written documentation must be kept of any hazards that are found and the corrective action that was taken.

Our job site safety policies also include:

- Calling for utility locates *before* work begins; using the appropriate PPE and dressing properly (long pants, sturdy boots or shoes, etc.) for the work to be done
- Practicing good housekeeping to prevent slips and trips and other preventable injuries
- Using safety equipment (traffic cones and similar devices) when appropriate to help protect the general public
- Parking vehicles and equipment in a safe manner
- Job sites must be maintained in a safe condition at all times. Additionally, before leaving the job, supervisors must ensure that any unsafe conditions have been corrected or that customers have been warned about any condition that cannot immediately be corrected and could result in injury. Our company also prohibits children from being on job sites.

Preventing Injuries Due to Handling Materials

Back injuries and other injuries resulting from improperly lifting or moving heavy materials are a major source of lost workdays and increased workers' compensation costs for our industry. _____*'s* program to reduce the risk of these often chronic and painful employee injuries includes daily five- to 10-minute (mandatory) warm-up stretching exercises for all employees, continual training on safe lifting and moving techniques, the provision of manual and mechanical lifting devices, guidelines on when to use such devices, and ongoing assessments for hazards that could result in injuries due to manual handling of materials. We also require employees to seek assistance with objects that weigh 50 pounds or more and to promptly report any work-related back strains or other injuries due to handling materials.

Some common examples of how back injuries occur are:

- Lifting — heavy items or bulky objects
- Twisting — changing a flat tire or shoveling
- Jumping — off a truck or trailer bed
- Slipping — while getting out of equipment or on slick surfaces

Our training includes teaching employees these basic **safe lifting procedures:**

- Wear sturdy boots or shoes with good traction.
- Get a firm footing. Then part your feet and put one foot slightly in front of the other.
- Bend your knees, *not* your waist, and lift with your legs.
- Keep your back as straight as possible.
- Get a good grip on the object. Hold it as close to your body as possible.
- Don't jerk the object or twist your body.
- Use mechanical or manual lifting devices when available.

Preventing Injuries Due to Repetitive Motions

Repetitive motion injuries are a concern to our company, both for our outdoor crews and our office workers. We train our employees to recognize and reduce the risk of repetitive motion and other ergonomic injuries. Our policy also includes providing the proper tools and equipment for the job, requiring employees to take breaks to avoid prolonged repetitive motion, regularly assessing the workplace for repetitive motion and other ergonomic hazards, and requiring all employees to promptly report all work-related ergonomic injuries.

Safety Responsibilities continued:

OSHA Compliance

_____ makes every effort to comply with all of the OSHA regulations that affect us. We post the required OSHA job safety poster in a conspicuous location where we post other employee notices. We maintain an OSHA-required injury and illness log for each calendar year and promptly record all OSHA-recordable injuries and illnesses. We post OSHA Form 300A Annual Summary of Work-Related Injuries and Illnesses as required from February 1 to April 30 of the following calendar year.

We also notify the nearest OSHA area office or call (800) 321-OSHA within eight hours of any work-related employee fatality or incident that results in the hospitalization of three or more workers. We know that many states have state-run OSHA plans and have made our supervisors aware of whether we are covered by federal OSHA or a state-run OSHA plan.

Chemical/Pesticide Safety

The safe use of pesticides and other chemicals is extremely important to _____. In addition to complying with OSHA's Hazard Communication Standard, our company ensures the safe handling and use of chemicals by providing employees with the appropriate PPEs, as specified on the material safety data sheet (MSDS) and the product label, and by providing hands-on training on how to use it.

We also provide employee training on topics such as the safe use of chemicals, proper mixing and storage procedures, emergency and first-aid procedures related to chemical use, safe clean-up after chemical use, proper cleaning and disposal of chemical-contaminated clothing and protective gear, and what to do if a chemical spill occurs.

Our company requires all chemicals to be stored in their original containers and in a locked location. We also follow all regulatory requirements relating to the use of chemicals, including, but not limited to, record keeping requirements, re-entry intervals, transporting chemicals, and reporting spills.

Hazard Communication/Material Safety Data Sheets (MSDSs)

Our company complies with OSHA's Hazard Communication Standard by:

- Having a written hazard communication policy
- Maintaining current MSDSs and properly labeled chemical containers for each hazardous chemical we use
- Maintaining a current list of all hazardous chemicals we use
- Providing information and training to employees as required under the standard
- Notifying outside contractors in person of any chemical hazards that they may encounter during their work for us

We have identified one individual to be responsible for our overall hazard communication program and have identified additional employees to be responsible for other required tasks. We ensure that any employees who may be exposed to hazardous chemicals receive the OSHA-required training in a language and manner that they understand. We also ensure that employees are trained both before their first assignment with a hazardous chemical and whenever a new hazardous chemical is introduced into their work area.

Personal Protective Equipment (PPE)

_____ conducts written hazard assessments to determine if using PPE is likely to be necessary in a specific work area. If we are unable to eliminate or reduce the hazard by other means (such as engineering or administrative controls), we provide PPE to protect our employees. We require our supervisors to strictly enforce using the PPE that is provided. Our PPE policy also includes training employees, ensuring that the assigned PPE properly fits, and requiring employees to demonstrate their ability to properly use the PPE before performing a task.

Safe Equipment Operation

We require all employees to operate equipment in a safe manner and to abide by our equipment safety rules. Such equipment includes, but is not limited to, skid steer loaders, lawn mowers, forklifts, front-end loaders, and any other powered equipment. Powered equipment can be very dangerous, so we require employees to undergo hands-on training designed specifically for each piece of powered equipment before being allowed to operate it.

No unauthorized persons are allowed on company equipment, and equipment must be operated in a manner and for the purpose for which it is intended. Company equipment must not be left running and unattended, and it must be kept in a proper, safe location when not being used. We also require pre-trip and post-trip equipment inspections to ensure the operator's safety.

Lockout/Tagout

_____ has a written lockout/tagout program aimed at protecting our employees and contractors from the unexpected start-up of machinery or equipment — or the release of hazardous energy — while the equipment is being serviced or maintained. Our procedures include isolating the powered equipment or machinery from its energy source, dissipating any stored, residual energy, then applying specialized locks and tags.

Our lockout/tagout program applies to, but is not limited to, such equipment as front-end loaders, skid steer loaders, and composters. In accordance with OSHA's requirements, our program includes general and equipment-specific lockout/tagout procedures; training for employees who operate the affected machinery or equipment and for those who may be in the area when the equipment is being serviced; authorization of certain trained employees to apply lockout/tagout devices; and the issuance of specialized locks and warning tags to those employees.

Integrity Insurance®

Section 4:

Management Resource Guide

Making a strong top-management commitment to safety and adopting a comprehensive company safety policy are critical first steps in bringing safety to a higher level at your company. It is also important to identify safety "champions" throughout the company and to ensure that your safety program is implemented and understood by employees at all levels.

This section aims to guide you in further developing and implementing your company safety policy. It includes checklists, tips, sample policies, and suggestions on where to find additional resources on a specific topic.

Here is one example of how you can successfully use this section: You have decided that it is important for your company to have a return-to-work/modified duty program, which aims to return injured or ill employees to the workplace as soon as medically possible. You have reviewed the language in the "Return-to-Work/Modified Duty" section of Section 3 and have decided to incorporate the language as is into your company safety policy.

It is then time to review Section 4 of this guide under "Return-to-Work/Modified Duty." Here you will find some suggestions from an occupational medicine physician to assist you in designing a return-to-work program, a return-to-work/modified duty checklist that outlines steps to take to establish an effective program, a sample return-to-work program policy statement from a company in our industry, and additional resources for more information on return-to-work programs.

Once you have familiarized yourself with this information, you can then look at Section 5, where you will find two additional forms to assist you in your return-to-work/modified duty program — a "Return-to-Work Form for Physician" and a "Temporary Modified Duty Log." These forms can be used as is or modified to meet your operation's specific needs.

Note: *Most of the resources listed at the end of each section of this part of* Safety Program for Green Industry Companies *are free. Using these resources can save you valuable time and money.* The checklists, tips, and resources provided in Section 4 of this safety program are by no means exhaustive.

We encourage you to also seek out other good safety resources. Our ultimate goal is to assist you in building a true safety culture at your company. This is not something that happens overnight but can happen over time as you create heightened safety awareness among your employees.

Safety Responsibilities and Rules

It is important to clearly communicate your company's safety responsibilities and rules to *all* employees and treat your employees fairly and consistently. One of the biggest difficulties many green industry employers have is getting crew leaders and other supervisors to follow through on their safety responsibilities, including the enforcement of company safety rules. Here are a few tips to assist you:

- **Constantly reinforce the importance of safety to your supervisors.** Tie specific safety goals to their performance reviews. Consider tying supervisors' bonuses to the successful completion of certain safety objectives.
- **"Walk the talk."** Set a good example. Do not expect your supervisors to take safety seriously if they see you ignore a hazard warning sign, bypass or disable a safety guard or shield, or approach a potentially hazardous situation without using the appropriate personal protective equipment (PPE).
- **Budget time for safety meetings and safety training.** This is often difficult to do, especially during the busiest times of the year, but it is critical to make it routine if you want your supervisors to take safety seriously. A "tailgate" safety training session can be conducted in five to 10 minutes at a job site or other location where workers gather and can make the difference between a *safe* day and a serious injury to a crew member.
- **Budget for high quality PPE and other safety-related items (signage, etc.).** When your supervisors see that you are willing to invest in safety — not just talk about it — they are much more apt to believe that safety truly is an important top management priority.
- **When materials are ordered for a job, provide the supervisor with a list of safety necessities to complete the job.** A written list will help ensure that safety is not forgotten.

Safety Responsibilities and Rules continued:

- **Regularly discuss the cost of workers' compensation claims with supervisors.** Talk to them in terms that they can relate to. For example, show them how much workers' compensation costs are eating into company profits and annual pay increases and supervisory bonuses. Ask your insurance agent to provide loss measurement statistics for your company. (See Section 5 for a form to assist you in measuring the impact of injuries and illnesses on profits.)
- **Monitor your supervisors' own safety practices.** Make it a point to show up at job sites, walk through the repair shop, and so on to see what supervisors themselves are doing. If you find "poor housekeeping," supervisors failing to wear required safety glasses, or other safety-related problems, you will know it is time for a serious talk. (See Section 5 for a form that your supervisors can use to document safety violations.)

Note: *It is also important to train your salespeople to recognize and plan for hazard prevention as part of the bidding process.*

Motor Vehicle Safety

Having a well thought-out motor vehicle safety program is one of the most critical safety-related steps that your company can take. Motor vehicle accidents (involving trucks, trailers, vans, truck-trailer combinations, and other vehicles) are a *major* source of costly insurance claims within our industry. These accidents often can be prevented, but it takes continuous driver education and training — and a strong commitment from management to make motor vehicle safety a top company priority.

Where do you begin in setting up such a program? A good place to start is to develop criteria for drivers. It is important to stick to that criteria and treat your vehicle operators fairly and consistently.
In setting up your program, remember that minimum age requirements vary among insurance companies.

Many strongly advise that drivers be at least 21. If you do allow employees under the age of 21 to drive, be sure they have a clear motor vehicle record and driving history. Accident and insurance claim statistics show younger drivers to be the most at risk of being involved in an accident.

In creating driver criteria that employees must meet, consider your company's overall safety and motor vehicle accident record, what your insurance company recommends and/or requires, and such factors as maturity level and driving experience. Do not just look at the fact that you may badly need drivers and do not have enough staff to get the job done.

Be sure to put your driving record guidelines in writing and communicate them to your employees. Let your employees know that it is ultimately up to your insurance carrier/underwriter to accept individual drivers, even if a candidate meets your company's guidelines. An example of driving record guidelines that you can use is on page 4-4.

Once you have established your driving record guidelines, ensure that all new drivers have reviewed your company's motor vehicle safety policy, including the specific responsibilities for drivers. (See the "Motor Vehicle Safety" portion of the "Company Safety Policy" in Section 3.) Make sure they meet all driving record guidelines and understand what their responsibilities are if they become involved in an accident.

Note: *These are spelled out in the "Accident Reporting/Investigation" section of the "Company Safety Policy."*

Then, have drivers read and sign a Motor Vehicle Report Release form. (See Section 5 for this form.) Also, be sure to check motor vehicle reports at least annually and let your drivers know that they will be checked routinely.

Many insurance companies provide motor vehicle reports as a service.

Next, have drivers read and sign a Vehicle Use Agreement. (See Section 5 for this form.) They also need to demonstrate the ability to read and follow written directions, maps, and oral directions, as well as the ability to report to a specific location using a client's street address, landmarks, and alternate routes.

Motor Vehicle Safety continued:

Your drivers also need to:

- Demonstrate the ability to give directions (both oral and written).
- Pass both a company-conducted written and road test. ***Note:*** *Be sure that all drivers have undergone hands-on training and that drivers who will be pulling trailers have taken performance-based training on the operation of a specific piece of equipment, including training on securing and covering loads with tarps.*
- Read and sign your company's cell phone safety policy.
- Have a valid commercial driver's license (CDL) if they will be operating any vehicles or combinations (large trucks with trailers, etc.) that require CDLs.
- Submit to (and have signed a consent form for) a drug/alcohol test. (See the Drug-/Alcohol-Free Workplace section for more information on drug and alcohol testing.)

Finally, be sure that you have checked a new driver's references to verify past operating experience.
It is important to monitor your drivers' performance to ensure that all drivers continue to meet your company's requirements. Ensure that all drivers:

- Maintain driving records that meet driving record guidelines
- Are held accountable for the care and operation of the vehicles they use
- Inspect the vehicles they use each day
- Sign consent forms with willingness to submit to drug and alcohol tests (and are aware that certain prescription drugs also can alter their ability to drive a motor vehicle)
- Receive consequences (recognition or discipline) based on their safety record

Note: *Check with your insurance agent for guidance if you learn that one of your current drivers had a major driving violation in the past that you were unaware of.*

A sample Cell Phone Safety Policy that you can use or modify to fit your needs appears on page 4-5.

Motor Vehicle Safety Resources

Numerous resources are available on the topic of motor vehicle safety; many of these resources are free. A good place to start is with your insurance (automobile policy) carrier. For information on CDLs, check with the Federal Highway Administration Office of Motor Carriers in your state. (CDL requirements vary from state to state.) Also visit the Federal Motor Carrier Safety Administration's Web site at *www.fmcsa.dot.gov.* You can link from this site to information on CDLs, including a CDL fact sheet.
Another possibility is to "Google" for CDL information in your state. For example, search for "WI commercial drivers' licenses."

For other training resources and regulatory information concerning motor vehicle safety, check with your state police. You can also check these Web sites:

- National Highway Traffic Safety Administration at *www.nhtsa.gov*
- Network of Employers for Traffic Safety at *www.trafficsafety.org*
- Federal Highway Administration Office of Safety at *http://safety.fhwa.dot.gov*
- OSHA's Safety and Health Topics Web page for Motor Vehicle Safety at *www.osha.gov/SLTC/ motorvehiclesafety/index.html*
- National Traffic Safety Institute at *www.ntsi.us*
- National Safety Council at *www.nsc.org*

Safety Committee

An active safety committee with both employee and management representation is the backbone of a good safety program. It is important to rotate committee members to get fresh ideas and to develop safety champions throughout your company. In a true safety culture, these safety champions will excite others about safety, and safety will come up at *every* company meeting, no matter what the planned topic is.

Having a strong safety committee is the key to developing a strong safety culture.

There are no set rules about how many people are needed for a safety committee. If you have a small company, even a two-person committee (a supervisor or other manager and an employee) is a good place to begin.

Checklist for Effective Safety Committee

- Members (safety champions) are chosen from throughout the company. Employees outnumber supervisors and other managers on the committee. ***Note:*** *This is important since employees are the ones most familiar with your company's day-to-day hazards.*
- The safety committee chairperson rotates every two years to give others a chance to hold this key leadership position.
- Committee members rotate on a predetermined schedule, with at least some rotation occurring once a year. This facilitates the infusion of fresh ideas and enables past committee members to spread enthusiasm about safety throughout the company.
- Monthly committee meetings have pre-established measurable goals, a written agenda, a format (members take turns talking with no interruptions, and the person reporting on a specific topic speaks first for three to five minutes, etc.), and an adhered-to starting and ending time.
- Management provides the committee the flexibility to meet more often than once a month when the chairperson determines it is warranted.
- The committee secretary uses a specified format to take and distribute minutes at each meeting. (See Section 5 for a Safety Committee Meeting Minutes form.) Copies of meeting minutes are distributed to all other company employees.
- Designated committee members are trained in filling out and posting required OSHA forms.
- Committee members are empowered by management to make changes (implement new safety training, eliminate or reduce identified hazards, etc.).
- The committee gives members specified timetables by which to complete "assignments."
- Committee members are asked to become safety ambassadors and to help identify other safety champions throughout the company.

Safety Orientation

A safety orientation for new employees should be a prelude to more extensive safety training. Orientation is an excellent time to review each section of your company's safety policy with new employees. Be sure that this is done in a language and manner that your workers understand.

Note: *Do not assume that all of your employees can read and write, even in their own native language. This is especially the case if you have workers from other countries who may have received little or no formal schooling. For this reason, it is usually best to orally review each section of the safety policy with employees during orientation, using a bilingual employee for assistance if needed.*

Safety Orientation continued:

Resources

For assistance with non-English speaking employees, first check with your own staff and determine if one of your supervisors, managers, or employees has enough of a command of both English and your non-English speaking workers' language(s) to assist. If not, check these resources: community-based agencies serving Hispanics/Latinos (or other ethnic populations), foreign language departments at local colleges or universities, migrant health clinics, and local churches (with non-English speaking members).

Safety Training

Safety training can take many forms and can cover any number of different topics. The types of safety training that are generally most effective for companies in our industry are:

- Oral training (in a language your workers understand)
- Visual training (the use of videos, photographs, illustrations, and any other visual aids)
- Hands-on training or demonstrations — having employees actually demonstrate how to put on their safety glasses, hearing protection, and other PPE, how to correctly start a piece of equipment, etc.

Note: *Remember that it is extremely important to have employees demonstrate that they can safely operate vehicles or equipment* before *they are cleared for use.*

How do you come up with training topics, especially for brief tailgate training sessions that are conducted on a weekly basis? Here are a few tips:

- **Review your company's injury, illness, and property damage accident records.** Also review any near miss reports you receive. Look for trends over time. Even if there is a one-time incident, such as a bee sting or a "backing up" accident in your equipment yard, follow up with at least a brief tailgate training session on that topic.
- **Talk with your insurer/workers' compensation carrier and with others in the industry.** Ask about the types of incidents that they are seeing. If it has happened to someone else, chances are it could also happen at your company. Be proactive and do training on the topic *before* an incident occurs.
- **Ask your own employees for ideas.** Ask safety committee members as well as other employees.
- Walk around your operation, talk with workers during their breaks, ask key employees to get ideas from others — do whatever you can to get input from your employees since they will know where additional training is needed.
- **Plan seasonal safety topics, as well as topics that cover safety at work and at home.** Some examples of seasonal topics are heat stress, sun protection, cold-related injury (during the winter months), and insect bites and stings.

Note: *Spring start-up is a particularly high-risk season because of the many new-hires who have no experience with your company's safety culture.*

- **Request a free on-site safety audit from the state OSHA consultation program in your state.** (See "OSHA Compliance" in Section 4 for more information.)

Safety Training continued**:**

Checklist for Effective Safety Training

- **Know your workers.** Think about how they will best receive safety messages, whether visually, orally, etc. Determine if there are any language barriers. If so, be sure to conduct training in your workers' native language or have a translator available at English language sessions.
- **Understand your employees' cultures.** A good understanding will help you know when cultural issues come into play. For example, in many Hispanic/Latino cultures, direct eye contact with those in authority is considered disrespectful. So if a supervisor is conducting a safety training session, do not automatically assume that a Hispanic/Latino worker who does not make direct eye contact is not listening.
- **Choose a location as free from distractions as possible.** It is important to conduct tailgate training (brief sessions on a single safety topic) in a location that is comfortable for workers. If you are conducting tailgate training on a job site or other location that is likely to get noisy, it is a good idea to do it at the start of the workday.
- **Keep training sessions as small as possible.** This enables you to pay close attention to all trainees' facial expressions so that you can tell if they do not understand something. Small sessions also facilitate greater employee participation.
- **Personalize training sessions.** Use examples of injuries or near misses that have occurred at your company and talk about how these affected employees. With Hispanic/Latino workers (whose culture places a high value on family), discuss the effect that serious injury or death either has or would have on workers' children and other family members.
- **Do not assume that all of your employees can read and write.** This is especially important if you have workers from Mexico or other countries who may not have had much schooling. Avoid written tests or quizzes whenever possible.
- **Let employees move around.** Sitting in one spot for too long can greatly inhibit retention. Incorporating hands-on training and demonstrations gives workers a chance to get out of one spot.
- **Be available to answer questions.** While using safety videos can be highly effective, it is important that someone with enough knowledge of the topic be at the training session to answer any questions that may arise.
- **Make training sessions fun.** One example of how to do this in a session on PPE is to have a worker demonstrate how to put on the equipment incorrectly (upside down or backward). Next, have someone else show how to wear it the correct way.
- **Encourage participation.** In addition to answering questions, encourage employees to relay their own personal experiences on the topic being discussed.
- **Keep written documentation.** Have everyone sign a training log (or put a witnessed "X" next to his/her name if he/she cannot write) before being allowed to leave. (See Section 5 for a Safety Meeting/Training Attendance Log.)

Safety Training Resources

Numerous safety training resources are available on the Internet. Be sure, however, that you either know enough about the topic yourself, or if you're unfamiliar with the source, check it with someone who does. Good training resources include:

- Integrity's loss control representative
- Integrity Insurance Web pages
- National Ag Safety Database, *www.cdc.gov/nasd* (search for English and Spanish language materials by topic)
- OSHA, *www.osha.gov* (for fact sheets and other training materials in Spanish and English)
- National Institute for Occupational Safety and Health (NIOSH), *www.cdc.gov/niosh,* click on "Safety and Prevention" (at the top) to get to specific training topics.
- National Safety Council, *www.nsc.org*

Drug-/Alcohol-Free Workplace

A drug-/alcohol-free workplace program that includes drug and alcohol testing in accordance with state and federal laws is one of the best investments you can make. Drug and alcohol abuse costs our economy as much as $246 billion per year. Employers pick up most of these costs through workplace accidents, reduced productivity, absenteeism, tardiness, higher health insurance premiums, and an increased number of workers' compensation claims.

Furthermore, drug abuse has been linked to equipment theft within the green industry. In south Florida, for example, the *Palm Beach Post* reported that lawn care companies had been reporting the thefts of weedeaters, edgers, leaf blowers, and at least one truck and trailer. In several cases, the newspaper reported, suspects told police that they stole the equipment to support their drug habits.

Where do you begin in setting up a drug-/alcohol-free workplace program? One good place to start is to establish a *zero tolerance* policy for drugs, alcohol, or drug paraphernalia on your property, on job sites, or in company vehicles or equipment at any time. Here are a few suggestions for your written policy:

- Require all employees (including managers) to report to work without the presence of *any* drugs or alcohol on them or in their systems. (Be aware that certain drugs, including marijuana, can stay in a person's system for weeks.)
- Include your company's right to test job applicants and employees for the presence of drugs or alcohol in their systems in accordance with the law.
- Reserve management's right to conduct unannounced searches for alcohol or drugs within the parameters of the law.
- Include strict disciplinary action for violators. (Be sure that you are familiar with federal, state, and any local statutes that may apply in such circumstances.)

Before setting up your program, it is essential to become familiar with *all* of the laws that could come into play. It is also a very good idea to consult with an attorney or other professional with experience in this area before implementing a drug and alcohol-testing program.

A few examples of federal or state laws that may impact your program are:

- **The Americans with Disabilities Act,** which prohibits employers with 15 or more employees in each of 20 or more weeks in the current or preceding calendar year from discriminating against alcoholics, current drug-free individuals with a history of drug addiction, and many persons enrolled in rehabilitation programs;
- **The Family and Medical Leave Act,** which may cover medical leave for drug or alcohol rehabilitation for employees who work at a site where 50 or more employees are employed within a 75-mile radius;
- **Various state laws,** which, in some cases, restrict testing, but in others, enable employers who have drug-/alcohol-free workplaces to receive discounts on their workers' compensation insurance.
- Also, if you have drivers who are required to have commercial driver's licenses (CDLs), it is important to become familiar with the Federal Motor Carrier Safety Administration's alcohol and drug testing rules for CDL drivers. For more information, visit *www.fmcsa.dot.gov,* then click on "Rules and Regulations," then on Federal Regulations — "Driver." From there, you can link to "Drug and Alcohol Regulations."

Checklist for Drug-/Alcohol-Free Workplace Program

- **Develop a written zero tolerance drug and alcohol policy.** Clearly communicate this policy to all supervisors, managers, and employees in a language and manner that they understand.
- **Encourage employees to report instances of suspected drug or alcohol use.** Develop a confidential reporting system that includes assistance for employees with drug or alcohol problems, such as an employee assistance program, referral to local hotlines, nonprofit agencies, rehabilitation programs, etc. (See the "Drug-/Alcohol-Free Workplace Resources" listings at the end of this section for assistance.)
- **Become familiar with the laws that may affect your program.** If you plan to conduct drug testing, it is essential to find out whether your state places any restrictions on such testing.
- **Check with your workers' compensation carrier and state** to find out whether your state offers financial incentives to employers who have drug-/alcohol-free workplaces.

Drug-/Alcohol-Free Workplace continued:

- **Decide under which circumstances you want to test for alcohol and drugs —** pre-employment, randomly, upon reasonable suspicion that a person is using alcohol or drugs, after an accident, upon return to duty following a leave of absence, and so on. ***Note:*** *Pre-employment and post-accident testing are definitely recommended.*
- **Contact a reputable medical facility or other testing company.** Additionally, ensure that the laboratory selected to read drug test results is *certified* by the federal government.
- **Ensure that you have a written Drug/Alcohol Testing Consent form,** and that you have developed written disciplinary procedures for employees who refuse to be tested and for those who test positive.
- **Train your supervisors.** If you plan to test when reasonable suspicion exists, ensure that supervisors understand the symptoms of drug abuse, what constitutes reasonable suspicion, and what they can and cannot legally do upon reasonable suspicion that an employee is using alcohol or drugs.
- **Train** all other employees. Include in your training the following: how substance abuse can impact them (impaired judgment, inability to follow safety instructions, etc.), how it can impact coworkers (accidents, etc.), the basic warning signs of alcohol and drug abuse, and how to get professional help.

Drug-/Alcohol-Free Workplace Resources

Good resources on setting up a drug-/alcohol-free workplace are the:

- U.S. Department of Labor's "E-law Drug-Free Workplace Advisor." Go to *www.dol.gov/elaws,* click on "All elaws Advisors," and then choose "Drug-Free Workplace Advisor."
- Substance Abuse and Mental Health Services Administration's "Making Your Workplace Drug Free — A Kit for Employers" at *http://workplace.samhsa.gov/WPWorkit/Workitindex.html.* For a listing of testing laboratories currently certified by the U.S. Department of Health and Human Services, click on: *http://workplace.samhsa.gov/ResourceCenter/lablist.htm.*
- National Institute on Drug Abuse, *www.nida.nih.gov.*
- National Institute on Alcohol Abuse and Alcoholism, *www.niaaa.nih.gov.*
- OSHA's Safety and Health Topics Web page on workplace substance abuse, *www.osha.gov/SLTC/index.html.*
- Use the Topics Pages Index and choose "Workplace Substance Abuse."
- Alcoholics Anonymous, *www.alcoholics-anonymous.org.*
- Narcotics Anonymous, *www.na.org.*
- Local medical provider(s), rehabilitation and treatment agencies, attorneys, and other professionals who specialize in employment law (for assistance in privacy and other related issues).

Workplace Violence

Unfortunately, workplace violence is a growing reality and a critically important safety issue for your employees, customers, suppliers, and the general public. Regardless of whether you operate a large or a small company, having a workplace violence prevention policy in place and training employees to be on the lookout for potential signs of violent behavior make good business sense and can save lives.

In creating your policy, remember that OSHA's "general duty" clause requires employers to provide safe workplaces for employees. Being unprepared for violence in the workplace could lead to violations of the general duty clause and stiff OSHA penalties. (See "OSHA Compliance" in Section 4 for more information.)

Additionally, domestic violence spilling over into the workplace is a major predictor of workplace violence.

Take very seriously employee complaints of threatening phone calls, e-mails, or stalking (waiting in the parking lot for an employee to leave work, following the person to work, etc.) from estranged spouses, ex-partners, or others. Ensure that you have a *written* policy that is clearly communicated to all employees in a language and manner that they understand. This policy should go beyond prohibiting guns and other weapons from being brought onto your property or job sites. (See "Workplace Violence" in Section 3 for suggested wording.)

Workplace Violence continued**:**

Steps for Employers

- **Develop a workplace violence prevention policy** that prohibits violent behavior and threats of violence by employees, customers, vendors and suppliers, and other visitors. Ensure that this policy includes definitions of violent behavior and threats of violence (sexual or physical abuse, including harassment, fights, and sabotage).
- ***Note:*** *Do not be deterred by thinking that you can enforce this policy only with your employees. Having such a written policy in place may help thwart certain behaviors at the outset, such as a vendor or customer making sexually demeaning remarks to one of your office workers.*
- **Include *strict* sanctions** for employees who violate this company policy, up to and including immediate termination.
- **Conduct a security audit** of your buildings and property. If you need assistance, check with your local police or sheriff's department or a local security company.
- **Review your job application forms and other hiring practices.** Pre-screen prospective employees by conducting pre-employment alcohol and drug testing and specifically asking former employers whether a prospective employee is eligible to be rehired. Seek advice from an attorney or other professional if you are uncertain about questions you can and cannot legally ask job applicants.
- **Train employees to immediately report** any violent acts or threats of violence. This is important regardless of whether they are on your property or at a job site. Train crew leaders to immediately call 911 or another source of assistance if violent behavior occurs at a job site or other location.
- **Ensure that you have a confidential reporting system** in place for employees who may be afraid to report threats or acts of violence.
- **Require all employees to have some form of plainly visible identification** and to wear it at all times when on the job.
- **Do not let visitors wander unescorted** around your property or buildings.
- **Train supervisors to recognize and document potentially violent workplace conduct,** defuse such conduct when possible, report all threats and other acts of violence or potential violence to upper management, and never retaliate against an employee who reports potentially violent conduct.
- **Train all other employees how to recognize the warning signs** of aggressive or violent behavior and where to seek assistance if they are facing such behavior at work or at home. ***Note:*** *It is a good idea to post the phone numbers of confidential community help lines in employee break rooms, restrooms, and other locations.*
- **Consult an attorney** with expertise in employment law when developing your policy.

Workplace Violence Resources

Numerous resources are available on the Internet. Good starting places include:

- National Institute for Occupational Safety and Health, *www.cdc.gov/niosh/homepage.html.* Search for "workplace violence."
- American Society of Safety Engineers, *www.asse.org.* Search for "workplace violence."
- OSHA's Safety and Health Topics Web page on workplace violence, which also provides links to other resources. Click on: *www.osha.gov/SLTC/index.html.* Use the Topics Pages Index and choose "Workplace Violence."
- Local law enforcement agencies, security firms, and loss prevention consultants.

Emergency Response

Developing a written emergency response plan for your company, regardless of size, can mean the difference between life and death. Coupled with employee training and unannounced drills, such a plan can reduce the risk of panic and ineffective response if an emergency does occur. Emergencies can range from a fire, explosion, or chemical spill to weather-related emergencies (hurricanes, tornadoes, etc.), a shooting, or other violence in the workplace.

In many cases, green industry employers are required by state, federal, or local regulations to have written emergency response plans. Among the many governmental agencies that may require you to have such a plan are OSHA, the Environmental Protection Agency (EPA), various state and local agencies (such as your state environmental quality agency), and even your local fire department or state fire marshal. (See "OSHA Compliance" later in this section.)

The following checklist will assist you in developing an emergency response plan, regardless of whether or not you are legally required to have one. Purdue Pesticide Programs has a number of excellent resources available that can guide you step-by-step in developing a plan. Do not be deterred if you run a small operation; assistance is definitely available.

Additionally, carefully check your insurance policies for chemical-related or other exclusions. Many employers have been caught off-guard when they have had an emergency, then unexpectedly found out it was not covered by their insurance policy.

Emergency Response Plan Checklist

- **Identify both on-site and off-site emergency response coordinators,** as well as alternates, and let employees know how to contact them during an emergency.
- **Ensure that all employees are trained in calling 911** (or other local emergency responders) and know how to reach the operator or another designated person in your company who will call 911.
- **Train all employees** in the usual and any alternate means of getting on and off company property during an emergency, and in the importance of not re-entering buildings or the property until officials have declared them safe.
- **Ensure that all employees, especially new employees, know where to get information during an emergency,** i.e., traffic reports, weather reports, news broadcasts with information on road and bridge closures, evacuations, and hazardous materials spills.
- **Develop an evacuation map for each building** on your property. Include emergency exit routes and a place where employees should meet outside of buildings during an evacuation. Also identify a second location in case it is not safe to meet at the first designated area.
- **Develop a site map of your property.** Among the items the map should include are each building's location; chemical and fuel storage areas; the location of electrical, gas, and water lines; the location of material safety data sheets (MSDSs), fire extinguishers, etc. Be sure that all company trucks also include fire extinguishers, first-aid kits, the appropriate MSDSs, and other safety supplies that may be needed in an emergency.
- **Post copies of the property site map** in employee break rooms, main office, and an outdoor mailbox that is separate from your regular mailbox and readily accessible to emergency responders.
- **Train all employees in your emergency procedures,** including designated meeting places both inside and outside of buildings (depending on the emergency), the location and use of fire extinguishers and other emergency equipment, emergency exit routes, and procedures to follow in an off-site emergency.
- **Hold unannounced drills** (evacuation drills and other weather-related emergency drills).
- **Ensure that employees are trained to leave buildings in pairs** and that a designated person is responsible for determining that all employees are accounted for.
- **Develop a communication method** (i.e., two-way radio, cell phones, etc.) to use during an emergency.
- **Provide copies of your plan** to your local fire department and other emergency responders. Give key managers, who are authorized to make decisions in an emergency, copies of the plan. You can place the 911 information sheets on page 4-15 by each telephone.

Emergency Response continued**:**

Emergency Response Resources

When developing your plan, start with local emergency responders, such as the fire department and emergency medical services. Invite them to tour your property and familiarize them with the location of any chemicals, MSDSs, etc. Your fire department also can assist you in the inspection of emergency entrances and exits, fire extinguishers, and other emergency equipment.

Additionally, Purdue Pesticide Programs has a number of resources available on this topic that you can download at no cost. For a listing of these resources, visit *www.btny.purdue.edu/PPP,* then click on "Publications, Newsletters, and Reports," then on "Purdue Pesticide Publication Index."

Among the excellent publications to check are:

- *Pesticides and Planning for Emergencies* (PPP-44)
- *The Quick Emergency Response Plan* (PPP-45)
- *The Insurance Policy* (PPP-49)
- *Rural Security* (PPP-64)
- *Communicating with the News Media* (PPP-60)

For information on federal regulatory requirements regarding emergency response plans, check OSHA Standard 29 CFR 1910.38 (Emergency Action Plans). Visit *www.osha.gov,* and then click on "Standards" (under "Laws and Regulations"), then type in 1910.38. Also check the SARA Title III Emergency Planning and Community-Right-to-Know Act's reporting requirements. Simply use Google or another Internet search engine, and type in "SARA Title III."

Accident Reporting and Investigation

Having clear, written procedures on what to do if an employee is involved in an injury accident, a property damage accident, or a near miss accident will help ensure that you get the follow-up information you need. Accidents can be stressful, so your best chance of getting accurate, objective information is by having forms and written procedures in place. Be sure to review these forms and procedures with all new employees when other safety procedures are reviewed.

It is important to promptly report any accident likely to result in lost workdays to your workers' compensation carrier so you can get assistance in managing potential claims costs. Also, green industry employers are required to notify the nearest OSHA Area Office within eight hours of any work-related employee fatality or incident that results in the hospitalization of three or more employees. You may also call (800) 321-OSHA (6742). ***Note:*** *If company management does not learn of the incident until later, you have eight hours from the time you learn of it to report it to OSHA. (See "OSHA Compliance" later in this section for more OSHA-related information.)*

When an accident occurs, the supervisor or other manager conducting the investigation should visit the accident scene as soon as possible. *Always* focus on getting appropriate medical attention to any injured persons first. It is then important to interview witnesses as soon as possible. Privately interviewing one person at a time is best.

Take photographs, draw sketches, or use other visual aids to help depict what happened and how the accident scene looks. The investigation also should include recommendations for corrective action to prevent a similar incident from occurring in the future. It is important that you follow through on these recommendations and that you document in writing the date that corrective actions were taken.

There are many different ways to investigate an accident. OSHA's Small Business Outreach Training Program's guide on accident investigation procedures includes some good tips that employers can use. Tips include:

Accident Reporting and Investigation continued**:**

- **Inspect the accident site.** Do not disturb the scene unless a hazard exists. Prepare sketches and photographs. Label each carefully and keep accurate records.

- **Interview accident victims and witnesses.** Depending upon the extent of injury, you may not be able to interview accident victims right away. Interview those who were present before the accident occurred and those who arrived at the site shortly after the accident. Keep accurate records of each interview. If local first responders (police, fire, emergency medical technicians, etc.) are involved in an investigation, it is best to let them conduct interviews as disinterested third parties. Follow up with them and obtain copies of their reports.

- **Determine:**
  1. What was not normal before the accident
  2. Where the abnormality occurred
  3. When it was first noted
  4. How it occurred

- **Then determine:**
  1. Why the accident occurred
  2. A likely sequence of events and probable causes (both direct and indirect)
  3. Alternative sequences

Accident reports should include as much information as possible on any injuries that occurred. Note the type of injury and the part(s) of the body affected. Be specific: indicate, for example, the thumb of the left hand. Reports also should note whether PPE was being used and whether any safety devices had been disabled or were missing, damaged, or otherwise defective. Be sure to create a detailed history of what occurred.

When interviewing witnesses:

- Be courteous.
- Take notes without distracting the person.
- Use sketches or diagrams, if necessary, to help the person.
- Have the witness write down his or her account of what occurred when possible. (If the witness is too upset or has limited reading and writing skills, have the person verbally give you his or her account of what happened, then read it back to the person to ensure that you correctly recorded what was said.)
- Have the witness sign a statement. (Or, if he or she cannot write, have the person put a witnessed “X” next to his/her printed name on the statement.)
- Keep the dated witness statement with the investigative report and any police report of the incident in your permanent safety files.

Refer to the Accident Reporting and Investigation section for suggested procedures for vehicle accidents. Additionally, the following injury accident policy and property damage accident guidelines, which were provided by Yardmaster, Inc., in Painesville, Ohio, can be used as is or modified to meet your company’s specific needs.

Your insurance agent is a good resource to assist you in developing such policies. (See Section 5 for additional accident-related forms.)

Resources for Accident Reporting and Investigation

Your insurance agent and insurance company are good places to start for information and suggested steps to take when investigating accidents. Another good resource is OSHA’s Safety and Health Topics Web page on “Accident Investigation” at *www.osha.gov/SLTC/accidentinvestigation/index.html.* From there, you can link to other resources, including the guide on accident investigation procedures that was developed by OSHA’s Small Business Outreach Training Program. Do not hesitate to ask other green industry companies with good safety programs and loss control records for copies of their accident investigation procedures.

First-Aid Policy

It is important that your company have a first-aid response policy, regardless of its size or whether or not it is covered by OSHA's Bloodborne Pathogens Standard (29 Code of Federal Regulations, Part 1910.1030). A written policy that is clearly communicated to employees will not only protect their health and safety but also will show them that you care. (See "First-Aid Policy Resources" below for more information on OSHA's Bloodborne Pathogens Standard.) Additionally, if your company performs installation or construction work, see the Medical Services and First Aid section of OSHA's Construction Standards (29 Code of Federal Regulations, Part 1926.50) for more information on first-aid requirements.

We encourage you to customize this policy as needed to meet your company's specific needs.
If your company provides a first-aid facility or a first-aid professional or technician such as a nurse or a designated first-aid provider for your employees, this policy will *not* fulfill all of the complex requirements of OSHA's Bloodborne Pathogens Standard. In such cases, you will be required to certify those employees and the facility for providing Bloodborne Pathogen services.

First-Aid Policy Resources

As many people as possible in your company should receive training in first aid and CPR. Two good resources for such training are your local chapters of the American Red Cross (visit *www.redcross.org,* then enter your ZIP code to find the chapter nearest you) and the American Heart Association (visit *www.americanheart.org*, then enter your ZIP code to find the chapter nearest you).

Other resources include your local medical provider(s), hospitals and clinics, and technical colleges. Your local fire department or emergency medical services also should be able to refer you to organizations that conduct first aid and CPR training. For information on OSHA's Bloodborne Pathogens Standard, visit *www.osha.gov/SLTC/index.html,* then click on "Bloodborne Pathogens."

Return-to-Work/Modified Duty

Having a proactive return-to-work/modified duty program can help you significantly decrease workers' compensation claims costs and be very beneficial for the injured or ill employee. Such a program lets employees know that you care and that they are an important part of your team.

Additionally, these programs reduce the length of time a worker is out on leave and the length and cost of his or her claim. They also help you avoid permanently replacing an employee and the associated costs of recruiting and training a new worker, as well as facilitate an employee's smooth transition back to his or her regular job.

It is important when setting up a program that you establish a good relationship with a local clinic or medical provider that shares your goal of an early, safe return to work. Occupational medicine specialists and your company's workers' compensation carrier are among the good resources that can assist you in designing a return-to-work program.

Consider these tips from Dr. Steve Kirkhorn, medical director of Systemwide Occupational Health at the Marshfield Clinic in Marshfield, Wisconsin:

- Recognize that progressive modified duty helps return a person to function by protecting the injured part while assisting in maintaining strength and avoiding significant de-conditioning.
- Know that the longer an injured employee is off work, the harder it is to resume a routine because of de-conditioning and becoming accustomed to not coming in to work. That is why "no return until the person is at 100 percent capacity with no restrictions" should be avoided if possible.
- Present your modified duty program, which may include light to moderate to heavy-duty tasks, as performing essential work that otherwise would not get done. Otherwise, it may be seen as punishment and the injured employee may become resentful and feel demeaned.

Return-to-Work/Modified Duty continued:

- Clearly convey your expectations that modified duty work will decrease and that the person will do more as healing progresses.
- Pass information about your modified duty program on to the clinic(s) and medical provider(s) you work with. Reviewing your program with the clinics that are generally used will help get everyone on the same page and assist doctors in being comfortable releasing injured employees to modified duty tasks.

Checklist for Return-to-Work/Modified Duty Program

- **Establish a good working relationship** with your insurer/workers' compensation carrier and a local clinic.
- **Determine what additional resources are available** to assist you in developing written descriptions of both regular and modified duty tasks. Be sure that all descriptions include physical requirements.
- **Invite professionals from the local clinic** you use to your company (and, when feasible, to job sites) to see the type of work your employees do.
- **Take the following steps** as soon as a work-related injury or illness is reported:

    1. Promptly report injuries and illnesses that are likely to require medical attention or days off work to your insurer/workers' compensation carrier. The sooner you report these, the sooner your insurer can help you manage the cost of these claims.
    2. If possible, have an injured employee's supervisor or another manager accompany the injured employee to the doctor or hospital for initial treatment. Ask the supervisor/manager to introduce himself/herself to the treating physician to begin establishing communication.
    3. Stay in regular contact with the employee and his/her doctor throughout the time the employee is off work. Let the employee know that your company cares and that you want to see him/her return to work as soon as medically possible because he/she is an important part of your team.
    4. Assign one supervisor or other manager to coordinate the claim and to ensure continuing communication among the injured/ill employee, the treating physician and any other involved health care providers, and your workers' compensation carrier.
    5. Ensure that the worker's supervisor carefully monitors the employee's modified job activities to ensure that the doctor's restrictions are being followed.
    6. Release the employee back to full duty and regular job only after you receive a written medical release from the employee's doctor.
    7. Dennis' Seven Dees Landscaping in Portland, Oregon, provided the following return-to-work policy statement. Your insurer/workers' compensation carrier and your medical provider are two good resources to assist you in modifying the following statement as needed to meet your company's specific needs.

(See Section 5 for a Return-to-Work Form for Physician and a Temporary Modified Duty Log.)

Return-to-Work/Modified Duty Resources

Your best resources in setting up a return-to-work/modified duty program are your insurer/workers' compensation carrier, local physicians and clinics where you normally send injured or ill employees, local occupational or physical therapists (or other occupational medicine specialists), seasoned employees (familiar with the physical restrictions of the jobs your employees do), other green industry companies that do similar work and have such a program in place, and the injured or ill employee himself or herself (for input when matching the person with modified duty work).

Buildings and Grounds

Maintaining your buildings and grounds (garage, offices, repair shop, parking lots, equipment yard, and similar areas) in a hazard-free condition is important not only for your employees but also for your company's public image. Ensure that all parking areas are clearly marked and that safety signage is prevalent throughout your buildings and grounds. Post large "Keep Out — Employees Only" signs at entrances to your garage, shop, and other areas that are off-limits to customers and other visitors.

Equipment yards and parking lots are all too often the sites for avoidable accidents, so be sure to train, train, and re-train your vehicle and equipment operators to pay close attention to what is around them, especially before backing up. Also, post "5 Miles Per Hour" speed limit signs in parking and production areas.

Repair shops are likely to have many hazards, especially if they are overcrowded with equipment that needs to be fixed and put back into use. These tips can help you promote safety in your repair shop:

- **Ensure that your shop supervisor checks for potential fire and electrical hazards on a daily basis.**
- Potential hazards include welding or painting operations close to combustible materials or in areas with inadequate ventilation, overloaded electrical outlets or frayed cords, improperly grounded electrical equipment, sparks coming from powered machinery or equipment, improper storage of paint or chemicals, and oily rags or other combustible materials left on the floor.
- **Strictly enforce "no smoking" rules.**
- **Ensure that at least one multipurpose fire extinguisher is located in the shop,** that it is regularly inspected, and that workers have been trained in its use.
- **Provide the appropriate PPE for each activity** (safety glasses or goggles, hearing protection, respirators, protective gloves, welding aprons, face shields, etc.) and train employees in its use. Ensure that PPE can be stored in a clean, safe place in close proximity.
- **Require workers to wear long-sleeved shirts, long pants, and sturdy shoes or boots with good traction (steel-toed footwear as appropriate).** Also require employees working with powered equipment to remove jewelry and to keep long hair tied back.
- **Strictly enforce good housekeeping rules.**
- **Stress the importance of keeping safety guards and shields in place,** never bypassing safety devices, and complying with your company's lockout/tagout procedures. (See "Lockout/Tagout" in this section for more information.)
- **Locate first-aid kits and telephones with access to 911** or other emergency phone numbers in your shop. (See "Emergency Response" in this section for a 911-information sheet that you can place by each telephone.)

Developing checklists for your supervisors to use to inspect buildings and grounds is a good idea and will assist in making them accountable. The following are two examples of checklists you can use, courtesy of Cagwin & Dorward, headquartered in Novato, California.

You can either have your supervisor's check off items that are acceptable or modify these checklists to include columns for "acceptable," "not acceptable," and "not applicable." Customize these checklists as needed to include items specific to your operation and retain copies with your permanent safety records.

Section 5:

Sample Forms and Safety Ideas

Driving Record Guidelines for _____

1. All company drivers must be licensed at least three years.
2. For drivers aged 25 and older: Up to two tickets or accidents
3. For drivers aged 21–24: Up to one ticket or accident
4. For drivers who are under 21: Clean record — no tickets or accidents

Any major violation at any age is unacceptable.

Major violations include:

- Driving under the influence of alcohol or drugs
- Failure to stop or report an accident
- Reckless driving due to speeding or other factors
- Driving while impaired
- Making a false accident report
- Homicide, manslaughter, or assault arising from the use of a vehicle
- Driving while license is suspended or revoked
- Careless driving
- Attempting to elude a police officer

Cell Phone Safety Policy for _____

Our company prohibits the use of cell phones while driving. This rule applies to the use of either company or personal cell phones while on company time.

If you receive a cell phone call while driving, wait until you can safely pull off the road to answer. Know that a growing number of states, counties, and municipalities are banning the use of cell phones on the road, and that you may be held personally liable if you are in an accident involving cell phone use. Company supervisors are responsible for keeping up to date on such cell phone laws in the areas in which we do business.

Our company also prohibits the use of cell phones while operating hazardous equipment (chain saws, skid steer loaders, etc.) and while carrying sharp tools. Company cell phones are not to be used for personal calls *except* in the case of an emergency. Personal cell phone use is restricted to before work, after work, or during scheduled breaks, except in the case of an emergency.

We receive detailed cell phone bills. Any nonemergency personal calls on a company cell phone will be billed to the employee who is assigned that phone.

Violators of this cell phone safety policy will be subject to disciplinary action.

_____

(Printed or typed name of employee)

_____ _____

(Signature of employee) (Date)

Emergency 911

When you call 911, the dispatcher will need to know:

Where: Address, intersection where help is needed

What: Describe what happened and what assistance is needed

When: Time lapse since the incident (particularly if a medical emergency)

Who: Suspect/patient/victim

Stay On The Line. If You Get A Recording, Stay On The Line.

Injury Accident Policy for _____

In an on-the-job injury, employees are required to abide by the following procedures:

When an accident does occur, supervisors, crew leaders, and employees need to be prepared to handle each situation calmly and professionally. Since the well-being of each valuable employee is very important, it is your responsibility to help maintain that person's well-being and be prepared to follow through with each step of handling an accident.

1. If the accident involves serious personal injury, you are required to call 911 for immediate assistance unless adequate care can be provided on site. Your primary responsibility is to provide the injured person(s) with prompt medical care.
2. As soon as possible after an accident has occurred, employees are required to notify their supervisor and our Personnel Administrator by telephone. The Personnel Administrator will determine the next course of action. (It should be noted that at this point, it is very important to keep calm and assure the injured employee that he or she will receive the best care possible.)
3. If injuries require more than first aid, the supervisor must make sure that the employee has a post-accident drug/alcohol test performed* (as stated in our company policies). This test can be given at the emergency center where the employee is taken or the company-provided medical clinic.
4. It is the responsibility of the injured employee's supervisor to process a series of reports. These must be filled out and forwarded to the Personnel Administrator within 24 hours.
5. Inform the employee of our company's injury and accident policy.
6. All information and required reports will be filed with Personnel. Any follow-up information concerning the accident needs to be added to the file.

*An employee may not be given a post-accident drug/alcohol test under the following circumstances:

7. The accident or injury was caused by an individual who is not an employee of our company.
8. If the accident or injury resulted in several of our employees being injured within a vehicle, only the driver will be required to have a post-accident drug/alcohol test.

Guidelines for Property Damage Accidents

Property damage, as defined by_____, is any damage to company trucks, trailers, equipment, buildings, or property, as well as property belonging to a client or other individual. The following guidelines should be followed if property damage occurs:

1. Take care of any emergency situation (injuries, broken pipes, etc.).
2. Report the accident to the Personnel Administrator at _____ immediately.
   (Telephone Number)
3. Notify your supervisor as soon as possible.
4. Contact any utilities involved for repair.
5. Make a written report of exactly what happened, including the cause of the accident.
6. Turn the report of the accident in to your supervisor.
7. Drug and alcohol testing may be required of employees responsible for property damage accidents.

First-Aid Response Policy

_____ is committed to providing a safe, healthful work environment for our entire staff. The increased nationwide concern regarding diseases transmittable through blood and other body fluids has changed the way all first-aid responders deal with such occurrences.

As part of that commitment, we are upgrading our first-aid response to include more extensive and detailed procedures. _____ new first-aid procedures consist of the following components:

1. **Identify those areas with higher potential for accidents.** All work sites, shop, equipment, and tool storage areas are considered high-risk areas for accidents.
2. **Design methods of control to minimize that risk.**
   - In each of these areas, a first-aid kit will be installed. This includes all company vehicles and other vehicles used for company purposes.
   - Protective gloves must be worn whenever handling tools or sharp objects.
   - All safety guards must be kept intact and operational. All sharp tools, blades, or sharp, pointed objects of any kind must be protectively covered or otherwise removed from exposure. Where no safety protectors exist, one will be created.
   - All of the identified risk sites will be inspected daily by the supervisor in charge of each specific area or whoever else is designated.
   - Inspections will ensure the application of these procedures.
3. **Post precautions and warnings in all such areas.** Signs showing emergency procedures will be posted in each identified area. This will include basic first-aid response and the telephone numbers of professional emergency responders and hospitals. All signs will be posted in a language that employees understand.
4. **Provide protective equipment and devices to protect accident victims and those employees who may provide first aid.**
   - All first-aid kits will contain at least two sets of latex gloves and/or vinyl gloves for workers who may have latex allergies. Anyone applying first aid must always use these gloves.
   - Protective gloves will be provided to employees who use tools, equipment, or devices that have sharp points or edges.
   - First-aid devices, such as face shields, biohazard bags, and pocket masks to prevent the transmission of blood or other fluids, will be provided in all first-aid kits.
5. **Conduct training sessions to familiarize all employees with the basics of first aid in a manner that is safe for both the accident victim and the first-aid provider.** Training sessions will be conducted on using the basic first-aid kit, protecting the first-aid provider, follow up, and cleanup procedures for fluids. These sessions will be held for all new employees and will be repeated at least once annually for all employees. Training will be in a language and manner that workers understand.
6. **Keep and display a record of all accidents (without employees' names), including those involving blood or other bodily fluids.** All accidents of any kind must be reported before the end of the work shift. A list of all such accidents (without employees' names) will be posted. Accidents involving blood or other bodily fluids will be indicated as such.
7. **Maintain a record of all accident details for later investigation, evaluation, and follow up.** A separate record showing all information regarding an accident, including the details of how it occurred, the people involved, the investigation, the results, and the corrective follow up will be kept private and secure for later investigation and analysis.
8. **Provide follow-up protection for employees involved in such accidents.** All employees involved in accidents involving blood or other body fluids will be offered the opportunity to receive medical screening and necessary vaccinations if the need is identified or recommended. Employees who believe that they may already be infected by such related diseases also will be allowed screenings and vaccinations, whether or not an accident has occurred. All such screenings or vaccinations must occur within 24 hours of any exposure.

Return-To-Work Program for _____

_____ has developed a program designed to assist workers who are temporarily disabled due to a work-related injury or illness. This program is called the return-to-work program.

When employees report on-the-job injuries or illnesses, they will be given certain forms and may be sent to a doctor for examination and/or treatment. If the doctor determines that the employee qualifies for our return-to-work program, the doctor will complete the appropriate forms, indicating the restrictions and conditions for transitional work. We will then attempt to provide a modified work position until the employee is able to resume regular duties. All modified work is temporary in nature and is designed to facilitate a return to regular duties as soon as possible. Modified duty positions may be offered at any location or for any shift.

Our company may modify, change, or discontinue the return-to-work program position or conditions of the program at any time.

Studies show that return-to-work programs are therapeutic and help speed the recovery process. In addition, injured employees stay in touch with the work environment and with other employees, which helps to facilitate a smooth and speedy transition back to their normal job. This also creates an opportunity for cross-training and developing new skills.

Everybody “wins” with this type of program. Our company wins by retaining the use of valuable, trained employees while at the same time minimizing workers’ compensation costs. Employees win by returning to their regular job and income sooner, and by avoiding the negative effects of a long-term absence.

If you have any questions about this program, contact

Repair Shop Safety Inspection Report

for _____

Location:_____ **Date:** _____

Prepared by:_____

- ❑ Chemical gloves at solvent tank
- ❑ Chemicals — use and storage
- ❑ Electrical hazards and grounding circuits
- ❑ Emergency care facility list posted
- ❑ Emergency care facility map posted
- ❑ Emergency phone numbers posted
- ❑ "Employees Only" signs posted
- ❑ Employees properly trained
- ❑ Extension cords and ground plugs serviceable
- ❑ Face shields in use
- ❑ Fire extinguishers adequate and current
- ❑ First-aid facilities stocked and accessible
- ❑ First-aid kits and personal protective equipment available
- ❑ Flammables stored properly
- ❑ Floor free of oil and grease
- ❑ Floor free of tripping hazards
- ❑ Housekeeping and sanitation
- ❑ Ladders/scaffolds/stairs
- ❑ Machine guarding in use
- ❑ Personal safety equipment/respirators in use
- ❑ Personal safety equipment/gloves in use
- ❑ Personal safety equipment/goggles in use
- ❑ Personal safety equipment/dust masks in use
- ❑ Protective clothing in use
- ❑ Safety rules posted
- ❑ Safety stands used when required
- ❑ Storage and handling of materials
- ❑ Storage of used shop cloths
- ❑ Utilities protected
- ❑ Welding tanks secured
- ❑ Shop lighting
- ❑ Shop security
- ❑ Ventilation
- ❑ _____
- ❑ _____
- ❑ _____

Recommendations/actions to be taken:

Reporte De Inspección De Seguridad Del Taller De Reparación

_____

Ubicacion: _____ **Fecha:** _____

Preparado por: _____

- ❑ Guantes químicos en el tanque de solventes
- ❑ Químicos — uso y almacenamiento
- ❑ Peligros eléctricos y circuitos de tierra
- ❑ Aviso y mapa del local de atención de emergencia colocado en lugar visible
- ❑ Números de teléfonos de emergencia colocados en lugar visible
- ❑ Avisos de “Sólo Empleados” colocados en lugar visible
- ❑ Empleados debidamente entrenados
- ❑ Cables de extensión y tomacorrientes en servicio
- ❑ Uso de protectores de rostro
- ❑ Extinguidores de incendio adecuados y vigentes
- ❑ Locales de primeros auxilios con existencias disponibles y accesibles
- ❑ Botiquines de primeros auxilios y equipo de protección personal (PPE-siglas en inglés) disponibles
- ❑ Inflamables debidamente almacenados
- ❑ Piso libre de aceite y grasa
- ❑ Piso libre de peligros de caídas
- ❑ Buen mantenimiento y condiciones sanitarias
- ❑ Escaleras/andamios/escalones de escaleras
- ❑ Uso de protección para maquinaria
- ❑ Uso del equipo de seguridad personal /respirador
- ❑ Uso del equipo de seguridad personal /guantes
- ❑ Uso del equipo de seguridad personal /lentes protectores
- ❑ Uso del equipo de seguridad personal /mascarillas contra el polvo
- ❑ Uso de ropa protectiva
- ❑ Reglas de seguridad colocadas en lugar visible
- ❑ Uso de bases de seguridad cuando sea necesario
- ❑ Almacenamiento y manejo de materiales
- ❑ Uso de armario para guardar la ropa del taller
- ❑ Servicios públicos protegidos
- ❑ Tanques de soldadura en condiciones seguras
- ❑ Iluminación del local
- ❑ Seguridad del local
- ❑ Ventilación
- ❑ _____
- ❑ _____
- ❑ _____

Recomendaciones/acciones a tomar:

Landscape Maintenance Dispatch Yard Safety Inspection Report

for _____

Location:_____ **Date:** _____

Prepared by:_____

- ❑ Chemicals — use and storage
- ❑ Electrical hazards and ground circuits
- ❑ Emergency care facility list posted
- ❑ Emergency care facility map posted
- ❑ Employees properly trained
- ❑ Extension cords and ground plugs serviceable
- ❑ Fire extinguishers adequate and current
- ❑ First-aid kit stocked and personal protective equipment (PPE) available
- ❑ First-aid kits in vehicles
- ❑ Flammables stored properly
- ❑ General conditions
- ❑ Ground free of tripping hazards
- ❑ Housekeeping and sanitation
- ❑ Ladders/scaffolds
- ❑ Machine guarding in use
- ❑ Safety rules posted
- ❑ 5-mph speed limit posted in parking and loading areas
- ❑ Storage and handling of materials
- ❑ Utilities protected
- ❑ Vehicle, chemicals stored properly
- ❑ Vehicle, PPE
- ❑ Vehicle, sprayers tagged
- ❑ Yard lighting
- ❑ Yard security
- ❑ _____
- ❑ _____
- ❑ _____

Recommendations/actions to be taken:

Reporte De Inspección De Seguridad Del Mantenimiento Del Paisajismo Y Del Patio De Despacho

_____

Ubicacion: _____ **Fecha:** _____

Preparado por: _____

- ❑ Químicos — uso y almacenamiento
- ❑ Peligros eléctricos y circuitos de tierra
- ❑ Aviso del local de atención de emergencia colocado en lugar visible
- ❑ Mapa del local de atención de emergencia colocado en lugar visible
- ❑ Empleados debidamente entrenados
- ❑ Cables de extensión y tomacorrientes en servicio
- ❑ Extinguidores de incendio adecuados y vigentes
- ❑ Botiquín de primeros auxilios en existencia y Equipo de Protección Personal (PPE-siglas en inglés) disponible
- ❑ Botiquines de primeros auxilios en los vehículos
- ❑ Inflamables debidamente almacenados
- ❑ Condiciones generales
- ❑ Piso libre de peligros de tropiezos
- ❑ Buen mantenimiento y condiciones higiénicas
- ❑ Escaleras/andamios
- ❑ Uso de protección de máquinas
- ❑ Reglas de seguridad colocadas en lugar visible
- ❑ Aviso de límite de velocidad de 5 mph colocado en lugar visible en el área de estacionamiento/carga
- ❑ Almacenamiento y manejo de materiales
- ❑ Servicios públicos protegidos
- ❑ Químicos debidamente almacenados en los vehículos
- ❑ Equipo de protección personal en los vehículos
- ❑ Rociadores etiquetados en los vehículos
- ❑ Iluminación del patio
- ❑ Seguridad del patio
- ❑ _____
- ❑ _____
- ❑ _____

Recomendaciones/acciones a tomar:

Construction Site Safety Inspection Report

for _____

Location:_____ **Date:** _____

Prepared by:_____

- ❑ Backup warning device operation
- ❑ Chemicals — use and storage
- ❑ Control of trips and falls
- ❑ Ear (hearing) protection in use
- ❑ Emergency care facility list posted
- ❑ Emergency care facility map posted
- ❑ Emergency phone numbers posted
- ❑ Employees properly trained
- ❑ Equipment operating practices followed
- ❑ Excavations properly guarded
- ❑ Extension cords and ground plugs serviceable
- ❑ Eye protection in use
- ❑ Fire extinguishers adequate and current
- ❑ First-aid kit stocked and personal protective equipment available
- ❑ Flammables stored properly
- ❑ Foot protection in use
- ❑ Hand tools serviceable
- ❑ Head protection in use
- ❑ Heavy equipment storage/parking
- ❑ Housekeeping and sanitation
- ❑ Manual lifting, proper technique
- ❑ Materials safely stacked
- ❑ Power equipment guarding in use
- ❑ Protection at heights (ladders, etc.)
- ❑ Protection of public
- ❑ Safety decals, heavy equipment
- ❑ Safety posters and legal notices posted
- ❑ Special protective clothing in use
- ❑ Utilities protected
- ❑ Vehicle inspection forms in use
- ❑ _____
- ❑ _____
- ❑ _____

Recommendations/actions to be taken:

Reporte De Inspección De Seguridad En La Obra De Construcción

_____

Ubicacion: _____ **Fecha:** _____

Preparado por: _____

- ❑ Operación del dispositivo de luces de alerta de retroceso
- ❑ Químicos — uso y almacenamiento
- ❑ Control de tropiezos y caídas
- ❑ Uso de protección del oído (audición)
- ❑ Aviso del local de atención de emergencia colocado en lugar visible
- ❑ Mapa del local de atención de emergencia colocado en lugar visible
- ❑ Números de teléfonos de emergencia colocados en lugar visible
- ❑ Empleados debidamente entrenados
- ❑ Cumplimiento de las prácticas de operación de equipos
- ❑ Excavaciones debidamente protegidas
- ❑ Cables de extensión y tomacorrientes de tierra en servicio
- ❑ Uso de protección para los ojos
- ❑ Extinguidores de incendio adecuados y vigentes
- ❑ Botiquín de primeros auxilios en existencia y Equipo de Protección Personal (PPE- siglas en inglés) disponible
- ❑ Inflamables debidamente almacenados
- ❑ Uso de protección para los pies
- ❑ Herramientas manuales en servicio
- ❑ Uso de protección para la cabeza
- ❑ Almacenamiento/estacionamiento de equipo pesado
- ❑ Buen mantenimiento y condiciones higiénicas
- ❑ Técnica apropiada para el levantamiento manual
- ❑ Materiales apilados en condiciones seguras
- ❑ Uso de paneles de protección del equipo eléctrico
- ❑ Protección en alturas (escaleras, etc.)
- ❑ Protección del público
- ❑ Señalizaciones de seguridad en el manejo de equipos pesados
- ❑ Afiches de seguridad y notificaciones legales colocados en lugar visible
- ❑ Uso de ropa especial de protección
- ❑ Protección de servicios públicos
- ❑ Uso de los formularios de los vehículos de inspección
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

Recomendaciones/acciones a tomar:

Sample Pre-Work Stretch Program

Guidelines:

- Stretch each day at the start of the shift.
- Supervisors lead exercises in designated stretching area(s).
- Move slowly into the stretch position.
- Concentrate on the muscle(s) being stretched.
- Breathe in a normal manner.
- Stretch to the point of feeling tension — but not pain.
- Hold each stretch for 10 seconds.
- Do each stretch two times.
- Do not bounce when holding a stretch.

Higher Reach Stretch:

- With arms up, stand on tiptoes.
- Spread fingers.
- Hold for 10 seconds, then slowly relax.

Shoulder Shrug:

- With arms at sides, relaxed.
- Lift shoulders up toward ears.
- Hold for 10 seconds and release.
- Move shoulders in forward circles, three times.
- Move shoulders in backward circles, three times.

Neck Stretch:

- Look straight ahead, shoulders relaxed.
- Drop left ear toward left shoulder.
- Repeat above steps to right.
- Lower chin to chest.
- Look up toward ceiling.
- Look straight ahead.
- Look over left shoulder.
- Look over right shoulder.
- Hold each stretch 10 seconds.

Rotator Cuff Stretch:

- Reach up and over with left hand.
- Place back of right hand in middle of back.
- Reach right hand toward left hand; clasp fingers if you can.
- Hold 10 seconds.
- Repeat on opposite side.

Lateral Stretch:

- With feet well apart and left leg facing left (left knee bent), lunge; left hand is on waist.
- Reach right arm up and over head, bending at waist to the left.
- Hold 10 seconds, then slowly straighten up.
- Repeat on other side.

Trunk Rotation Stretch:

- With hands clasped in front, looking straight ahead; left foot ahead of right.
- Slowly turn shoulders to left side.
- Hold 10 seconds, relax; bring wrists back to front.
- Place right foot ahead of left.
- Turn shoulders to right.
- Hold 10 seconds, relax; bring wrists back to front.

Knee Pull:

- With one or both hands clasped over left knee, pull knee toward chest and hold for 10 seconds.
- Repeat with right knee.

Quadriceps Stretch:

- Keep trunk upright.
- Grasp opposite ankle with same hand.
- Pull up toward hip and hold for 10 seconds.
- Repeat on other side.

Hamstring Stretch:

- Extend left leg, keeping heel to ground.
- Bend right leg, supporting body weight.
- Head up, looking straight ahead.
- Increase stretch by bending right leg more.
- Hold 10 seconds.
- Repeat on other side.

Calf Stretch:

- Place right leg forward, knee bent, lunge.
- Keep left leg straight and heel on floor, foot pointed straight ahead.
- Step left foot backward with heel remaining on floor.
- Lean forward for stretch; hold 10 seconds.
- Repeat on other side.

Back Flexion Stretch:

- Stand upright and cross right leg in front of left, keeping knees straight or slightly bent.
- Gently reach toward floor and to right side of body until stretch is felt.
- Hold for 10 seconds.
- Return to starting position and cross left leg in front of right.
- Repeat to left side of body.

Ten Easy Stretches — Exercises for Workers

- **Deep breathing:** Breathe in slowly through the nose, hold breath for two seconds, and exhale through the mouth. *Repeat three times.*

- **Thumb stretch:** With one hand palm up, pull the thumb gently downward. Hold for five seconds. *Repeat three times on each hand.*

- **Finger stretch:** Spread fingers of both hands wide. Hold for five seconds. *Repeat three times.*

- **Wrist stretch #1:** Place hands together with fingertips toward the ceiling. Lower hands and forearms toward lap until hands make a right angle to forearm. Hold for five seconds. Relax. *Repeat three times.*

- **Wrist stretch #2:** Hold hands in front of you, parallel to the floor. Raise and lower the hands, pivoting at the wrist. *Repeat three times.*

- **Shoulder roll:** With arms relaxed at the side, slowly lift and roll the shoulders forward in a circular motion, then roll them backward. *Repeat five times in each direction.*

- **Arm circles:** Raise both arms out to the sides, keeping the elbows straight. Make small circles with the arms, first forward, then backward. *Repeat five times in each direction.*

- **Head and neck rotation:** Tilt head to the left, bringing the left ear toward the shoulder as far as possible. Repeat to the right side. Bend five times to each side. Tuck in the chin. Look over the right shoulder as far as possible, then do the same over the left shoulder. *Repeat five times in each direction.*

- **Chest stretch:** Lock your fingers behind your neck. Press both elbows back as far as possible. Do not push your head forward. Return to starting position. Relax. *Repeat five times.*

- **Upper back stretch:** With arms folded at shoulder height, push back on alternate elbows. “Rock the cradle.” *Repeat five times in each direction.*

Policy For Contact By An OSHA Inspector

for _____

It is our company's policy that only certain persons are authorized to give out information **on behalf of our company** to OSHA inspectors, other government agencies, or similar outside parties making inquiries. These persons are:

_____(Company president)

or

_____ (Alternate manager).

It is our company's policy that one of these two persons be notified immediately for response on behalf of our company upon contact by an OSHA inspector or other federal, state, or local government representative. Contact by such government agencies may occur in person (including at a job site), by e-mail, telephone, fax, or other means.

Violation of this policy may be grounds for disciplinary action.

_____ _____

(Signature of company president/owner) (Date)

Chemical Safety Program Overview

for _____

- ❑ **Know what you have in inventory.**
  - The name of each product.
  - A material safety data sheet (MSDS) for each product.
  - The hazards of each product.
  - The storage requirements.
  - What precautions and protective equipment to use with each product.
  - What to do in case of an accident or spill involving each product.

- ❑ **Take precautions to avoid problems, accidents, and emergencies.**
  - Train employees in the safe handling of hazardous chemicals.
  - Obtain applicator training for employees who need it.
  - Require the use of proper protective clothing and equipment.
  - Keep untrained people away from hazardous materials.
  - Store products properly.
  - Comply with any containment requirements.

- ❑ **Know and observe any restrictions on what you can do and how you can do it.**
  - Be sure all products you use are registered in the state where you use them, and know any state and local restrictions on them.
  - Know which products are “restricted use” products.
  - Know whether U.S. Department of Transportation (DOT) or state or local DOT regulations affect your transport of products.

- ❑ **Plan ahead for what to do in case of an emergency.**
  - Post emergency phone numbers where you can find them quickly in your buildings and in all vehicles.
  - Know what to do in case of a spill or fire and be sure your employees know what to do.
  - Make sure your local fire department knows what you store and the related hazards.
  - Maintain good community relations.
  - Comply with community right-to-know regulations.

- ❑ **Be sure you and your employees are prepared to answer questions and demonstrate a responsible level of knowledge to the public.**
  - Maintain good records.
  - File reports if and when they are required.
  - Dispose of waste properly.

Bachman's PPE Assessment — Landscape/Nursery Department

Potential hazards that you may encounter in your daily work routine include the following:

- Heat and high temperature
- Skin sensitivity due to sunburn, dermatitis, or contact with poison ivy, poison oak, or wild parsnip
- Sharp objects
- Hand tools and power equipment
- Falling objects
- Chemical exposure
- Silica exposure
- Falls from heights
- Cave-ins from excavations
- Loud noise
- Heavy equipment

Be aware of these potential hazards each and every day prior to beginning a job. Be sure you have proper PPE available to ensure that you and your coworkers can perform the job safely.

PPE that you may require includes:

- Hearing protection
- Safety glasses
- Skin barriers and sunscreen
- Work boots or steel-toed shoes
- Head protection
- Respiratory protection
- Gloves
- Fall protection
- Chaps
- Knee pads

Be sure to check with your supervisor for available PPE.

PPE Assessment

Department: _____

Hazard Assessment: _____

PPE Evaluated: _____

_____ _____

(Name) (Date)

Instructions: These sheets should be used as a guide in conducting a walk-through of your work area by job title. Use as many sheets as necessary to identify hazards by type. Complete and return to the Safety Department for further assistance. If you need assistance during the survey, contact the Safety Coordinator.

Bachman's Vehicle & Equipment Safety Maintenance Program
Key Tag System

The **key tag** system has been designed to help employees keep motorized equipment in good working condition, maintain safety standards, reduce the risk of potential injury from malfunctioning equipment, and reduce repair costs.

- The key tag provides a simple safety checklist on one side and a record of service on the reverse.
- Each operator of a piece of equipment is responsible for following the checklist and reporting the equipment service date (if service is needed) to his/her supervisor immediately.
- When the first tag is attached, that date should be written on the back of the key tag with a black permanent marker. If possible, include the department number and equipment number.
- Each time the equipment is used, the operator is responsible for checking each of the items on the key tag.
- When the date on each tag reaches the 30-day limit, the equipment should be taken to the Motor Shop for service. If the equipment cannot be taken to the Motor Shop, contact the Motor Shop Manager for service at your location, and he or she will assign a mechanic to visit your location.

If any equipment shows a need for service before its indicated key tag date, tag the equipment for repair and notify the shop for scheduling.

Never operate or allow anyone else to operate any equipment that is leaking fluids, lacking proper fluid levels, not braking properly, or has other obvious malfunctions.

Motor Vehicle Report Release Form

I hereby grant permission for _____ 's
(Name of company)

insurance agency to secure my Motor Vehicle Report (MVR) to determine my "driving insurability" under the company's automobile policy and to release this report to my employer/prospective employer.

I understand that I will not be authorized to drive a vehicle on company business until such time that my MVR has been approved.

_____
(Driver applicant's full printed name)

_____
(Driver's license number)

_____ _____
(State) (Date of birth)

_____ _____
(Driver applicant's signature) (Date)

For company use only:

- ❑ This person **does** meet company standards as a driver under our policy.
- ❑ This person **does not** meet company standards as a driver under our policy.

Vehicle Use Agreement for _____

Employee name: _____

Driver's license no.:_____

Department/location:_____

The above named employee is authorized to operate a m otor vehicle on company business only under the following conditions:

- He/she follows and fully cooperates with our company's Motor Vehicle Safety Policy.
- He/she maintains a valid driver's license and remains fully insurable.
- He/she operates the vehicle in a safe manner, obeying all traffic laws.
- He/she and all passengers wear their seat belts.
- He/she promptly reports all motor vehicle accidents to his/her supervisor.
- He/she assumes full responsibility for any traffic violations and/or fines arising out of the use of the vehicle.
- He/she understands that personal use of company-provided vehicles is prohibited.
- He/she maintains insurance coverage of at least $300,000 for bodily injury on any personal vehicle used for company business.

The use of a company vehicle is an important part of your job. Only you may operate an assigned company vehicle. You will be expected to keep the vehicle clean and in working condition at all times and to promptly report any change in your driver's license status/validity. Any traffic violation may subject you to restricted driving privileges, suspension of driving privileges, or possible loss of employment.

Company management may modify or revoke this agreement at any time, with or without notice.

I have read, understand, and agree to comply with the above conditions in exchange for being authorized to drive on company business.

_____ _____

(Signature of employee) (Date)

_____ _____

(Signature of company manager) (Date)

Driver's Vehicle Inspection Report

It is important that your drivers inspect the trucks or other vehicles that they will be operating at the start of each workday. Some companies, such as James Martin Associates in Vernon Hills, Illinois, also require drivers and their supervisors to check additional items, such as insurance cards, camera, and vehicle registration form each payday.

Driver's Daily Vehicle Inspection Report for _____

Name of Driver: _____ **Date:** _____

Check Any Defective or Missing Items.

Truck Number: _____

Fluids:

- ❑ Antifreeze
- ❑ Brake fluid
- ❑ Fuel
- ❑ Oil
- ❑ Power steering fluid
- ❑ Transmission fluid
- ❑ Windshield washer fluid

Other:

- ❑ Air compressor
- ❑ Belts
- ❑ Body
- ❑ Cab free of trash/debris
- ❑ Clutch
- ❑ Defroster/heater
- ❑ Emergency brake
- ❑ Horn
- ❑ Hoses
- ❑ Lights:
  - Headlights
  - Stop/tail
  - Box lights
  - Turn signals
- ❑ Mirrors
- ❑ Parking brakes
- ❑ Safety equipment:
  - Cones
  - Fire extinguisher
  - First-aid kit
  - Material Safety Data Sheet book
  - Reflective triangles
- ❑ Seat belts
- ❑ Secure items in bed
- ❑ Steering
- ❑ Tailgates up and locked
- ❑ Tires/wheels/rims
- ❑ Windows
- ❑ Other: _____

  _____

  _____

Trailer Number: _____

- ❑ Back gates locked
- ❑ Coupling devices
- ❑ Coupling (king) pin
- ❑ Lights (all)
- ❑ Secure items in bed
- ❑ Tires/wheels/rims
- ❑ Trailer brakeaway and chain
- ❑ Trailer hitch
- ❑ Other: _____

  _____

  _____

Driver's Comments:

_____

_____

_____

_____

A service request must be made for repairs.

- ❑ **Noted defects have been corrected.**
- ❑ **Vehicle is safe to drive.**

_____

(Driver's signature)

Reporte De Inspección Del Vehículo

Es importante que sus conductores inspeccionen los camiones u otros vehículos que van operar al comienzo de cada día de trabajo. Algunas compañías, tales como James Martin Associates (Vernon Hills, IL) también requieren que sus conductores y supervisores chequeen además: la tarjeta de seguro, la cámara, el formulario de matriculación del vehículo, etc., cada día de pago.

Reporte de Inspección Diaria del Vehículo para _____

Nombre del conductor: _____ **Fecha:** _____

Marque Con Una Tilde Cualquier Defecto U Objecto Perdido.

Numero Del Camion: _____

Fluidos:

- ❑ Anticongelante
- ❑ Liga de frenos
- ❑ Combustible
- ❑ Aceite
- ❑ Líquido para la dirección
- ❑ Líquido para la transmisión
- ❑ Líquido lava parabrisas

Otros:

- ❑ Compresor del aire
- ❑ Correas
- ❑ Carrocería
- ❑ Cabina libre de basura/desperdicios
- ❑ Embrague
- ❑ Descongelante/calentador
- ❑ Freno de mano
- ❑ Corneta/bocina
- ❑ Mangueras
- ❑

Luces:

- Luces altas
- Frenos/traseras
- Caja de luces
- Luces de cruce

- ❑ Espejos
- ❑ Freno de mano o de estacionamiento
- ❑ Equipo de seguridad:
  - Conos
  - Extinguidor de incendios
  - Botiquín de primeros auxilios
  - Libro de hojas de datos de material de seguridad
  - Triángulos reflectores
- ❑ Cinturones de seguridad
- ❑ Objetos sujetados en la plataforma trasera del vehículo
- ❑ Dirección
- ❑ Compuertas traseras en posición vertical y cerradas
- ❑ Neumáticos
- ❑ Volantes/rines
- ❑ Ventanas
- ❑ Otro: _____

_____

_____

Numero Del Remolque: _____

- ❑ Compuertas traseras cerradas
- ❑ Dispositivos de acoplamiento y enganche
- ❑ Enganche de acoplamiento
- ❑ Luces (todas)
- ❑ Objetos sujetos en la plataforma trasera
- ❑ Neumáticos/volantes/rines
- ❑ Frenado del remolcador y cadena
- ❑ Enganche del remolque
- ❑ Otro: _____

_____

_____

Comentarios del conductor:

_____

_____

_____

_____

Debe hacerse una solicitud de servicio de reparaciones.

- ❑ **Los defectos observados han sido corregidos.**
- ❑ **El vehiculo esta en condiciones de ser manejado.**

_____

(Firma del conductor)

Safety Committee Meeting Minutes for _____

Location of meeting: _____ **Date:** _____

Chair of meeting: _____

Persons in attendance (specify whether committee members or guests):

_____ _____

_____ _____

_____ _____

_____ _____

Review of accidents/incidents and near misses:

_____

_____

_____

Review of injury-related costs:

_____

_____

_____

Recommendations/actions on above:

_____

_____

_____

Other topics discussed:

_____

_____

_____

Additional actions taken and comments: (Attach separate sheets if needed.)

_____

_____

Assignments/deadlines/future action items: (Attach separate sheets if needed.)

_____

_____

_____ _____

(Name of person taking minutes) (Signature)

Company Safety Meeting Report for _____

Location of meeting: _____ **Date:** _____

Manager conducting meeting: _____

No. of employees present: _____

Accidents/incidents reviewed:

_____

_____

_____

Other subjects discussed:

_____

_____

_____

Suggestions/recommendations:

_____

_____

_____

Actions taken:

_____

_____

_____

Printed names/signatures of employees (or witnessed "X" by name):

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Sheet(s) attached with additional attendees.)

_____

(Signature of manager conducting meeting)

Safety Meeting/Training Attendance Log

for _____

Title/topic of meeting: _____

_____

Name of trainer: _____

Date of meeting/training session: _____

The topics covered in today's safety session were presented in a language and manner that I understand.

Printed name of trainee	Signature or witnessed "X"
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Use additional sheets if needed.)

_____

(Signature of trainer)

Reunión De Seguridad/Control De Asistencia Al Entrenamiento

_____

Título/tópico de la reunión: _____

_____

Nombre del instructor:_____

Fecha de la reunión/sesión de entrenamiento:_____

Los tópicos cubiertos en la sesión de seguridad del día de hoy, me fueron presentados en un idioma y de una manera que entiendo.

Nombre del entrenado (Enletra de molde o imprenta)	**Firma o presenciado por "X"**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Uso hojas adicionales si es necesario.)

_____

(Firma del instructor)

Documentation Of Safety Violations for _____

Name of employee: _____

Date of safety violation:_____

Description of violation: _____

_____

_____

Is this a repeat violation? Yes _____ No _____

Disciplinary action taken:

- ❑ Verbal warning
- ❑ Written warning
- ❑ Other (please explain) _____

_____

_____

Employee's comments: _____

_____

_____

_____

This violation and disciplinary action have been explained to me in a language and manner that I understand.

_____ _____

(Employee's signature or witnessed "X") (Date)

_____ _____

(Supervisor's signature) (Date)

Translated by:_____

Telephone Answering Form For Accidents

For _____

Telephone operator: _____ **Date:** _____**Time:** _____

Was anyone injured? (Name) _____ Yes _____No _____

Which hospital(s) was the injured taken to?_____

Occupants in our company's vehicle:

(Driver)_____

(Passengers) _____

Was ambulance called? Yes _____No _____

Are police on the scene (or were they called)? Yes _____No _____

Truck/vehicle number: _____

Was truck loaded? Yes _____No _____

Was a trailer attached? Yes _____No _____

Was the trailer loaded? Yes _____No _____

What was in the trailer?_____

How many vehicles were involved, including ours? _____

Should I call a tow truck? Yes _____No _____

(Name/phone no. for towing company) _____

Was a citation given out? Yes _____No _____To whom?_____

Was the Driver's Report and Accident form filled out? _____

Were pictures taken? Yes _____No _____

Were witnesses recorded? Yes _____No _____
(Locate and document all witnesses with names, addresses, and phone numbers.)

What is your exact location?_____

(Tell the driver:) Do not discuss the accident with anyone except police! If you were at fault, you <u>cannot</u> drive the vehicle. Notify your supervisor immediately. He or she will arrange for a drug/alcohol test.

Driver's Report Of Accident for _____

Please illustrate in box below how accident occurred. Be sure to:

- Use squares to show the position of all vehicles involved.
- Indicate with arrows the direction each vehicle was traveling.
- Indicate the vehicle you were driving as No. 1; other vehicle as No. 2; etc.
- Fill in street names. Indicate if possible the direction of the compass.

_____ _____

(Driver's signature) (Date)

Owner or driver(s) of other vehicle(s):_____

Name:_____

Address: _____

Phone: _____

Driver's license # and state: _____

Insurance information: _____

Vehicle type: _____

Vehicle tags: _____

PLEASE GIVE THIS FORM TO YOUR SUPERVISOR. DO NOT send this copy to insurance company.

When an accident happens …

- **Stop at once** to investigate. Help anyone who is injured.
- **Identify yourself.** Give your name, address, and license number to the other party.
- **Witnesses.** Get the names and addresses of all witnesses to the accident. Use the Witness Cards in the envelope in your vehicle.
- **Police.** Contact local police officials. Give them details of the accident and obtain from them any reports that must be completed.
- **Do not discuss the accident** with anyone other than the police or a representative from our company's insurance firm.
- **Phone your supervisor at once** if personal injury or serious property damage is involved.
- **Complete and turn in this written report to your supervisor as soon as possible.**

Protect the scene of the accident by directing traffic, using flags, flares or reflectors, etc.

Witness Card

Name: _____

Address: _____

_____

Phone: (H) _____

(W) _____

E-mail: _____

Witness Card

Name: _____

Address: _____

_____

Phone: (H) _____

(W) _____

E-mail: _____

Statement From Witness for _____

Name:_____ **Date:** _____

Address: _____

Employer: _____

Home phone:_____ **Work phone:**_____

Please give a detailed description of what you saw regarding the accident/incident. (Please include location, date, and time.)

To the best of my knowledge, the above statement is a true and accurate account of the incident.

_____ _____

(Signature) (Date)

_____

(Print name)

Accident Investigation Report for _____

Name of investigator (supervisor or other manager): _____

Today's date: _____ **Date and time of accident:** _____

Location where accident occurred: _____

Type of incident:

- ❑ Injury
- ❑ Fatality
- ❑ Property damage
- ❑ Other _____

Accident reported to (OSHA, supervisor, etc.):_____

Description of accident: _____

_____

_____

_____

Employee(s) involved in accident: _____

_____ _____

(Name) (Date of hire)

_____

(Job description or title)

(Attach sheet for additional employees.)

Nature of any injuries (specific body parts affected, etc.): _____

_____

_____

First aid provided by:_____

Injured taken to: _____

_____

Corrective actions recommended/date taken: _____

_____

_____

(Attach sheets with employee statements, witness statements, photographs, diagrams of scene, etc.)

_____

(Signature of investigator)

Near Miss Incident Report for _____

Location: _____ **Department:** _____

Person reporting: _____

Time incident occurred (if known)**:** _____ **Date:** _____

Name(s) of person(s) who witnessed incident:

_____

_____

Describe (check one): _____ Unsafe act _____ Unsafe condition

_____

_____

_____

Action taken:

_____

_____

_____

Above report prepared by: _____ **Date:** _____

Follow-up Report and Plan of Action

- ❑ Discussed with staff involved _____
- ❑ Discussed at departmental meeting _____
- ❑ Reviewed procedures with individual _____
- ❑ Other _____

Comments:

_____

_____

_____

_____

_____

_____ _____

(Signature of manager) (Date)

Lost Time Incident Signage

This Company Has Worked _____ Days Without A Lost Time Incident.

The Best Previous Record Was _____ Days.

Do Your Part — Help Make A New Record!

_____

Esta Compañia Ha Trabajado _____ Dias

Sin Tiempo Perdido Por Causa De Accidentes.

El Mejor Record Previo Fue De _____ Dias.

Cumpla Con Su Parte — Ayude A Mantener El Nuevo!

Return-To-Work Form for Physician

Name of clinic: _____

Name of employer: _____ **Claim no.:** _____

Patient's name: _____ **SSN:** _____

Dear Doctor: Please provide the following information related to this injury/illness. This will assist us in returning our employee to work. Our company has a comprehensive return-to-work program for injured/ill employees.

- ❑ Employee may return to normal work duties at once.
- ❑ Employee may return with the following restrictions:

Hours per day: No restrictions _____ 8 hours _____ 6 hours _____ 4 hours _____
Other _____

Days per week: No restrictions _____ 5 days _____ 4 days _____ 3 days _____
Other _____

Lifting: No restrictions _____ 40 lbs. _____ 30 lbs. _____ 20 lbs. _____
10 lbs. _____ Other _____

Movement: No restrictions _____ Limited stooping _____
Limited bending _____ Limited overhead reaching _____
Limited pushing or pulling _____ Other _____

Length of restrictions:

- ❑ Employee may resume regular duties after _____ days.
- ❑ Employee will be re-evaluated on _____.
- ❑ Employee is totally incapacitated at this time and will be re-evaluated on _____.

Note: *This report must be returned to patient's employer within 24 hours of his/her visit.*

I saw this patient on (date) _____ and have made the following diagnosis:

_____

_____

_____

_____

Comments: _____

_____

_____

_____
(Physician's name — printed)

_____ _____
(Physician's signature) (Date)

Temporary Modified Duty Log

Name of company: _____

Name of employee: _____

Supervisor: _____

Location/job site: _____

Date/Time – Start And Finish	Duties Performed	Supervisor's Comments

I clearly understand, take responsibility for, and acknowledge the limits Dr._____ has placed on me while participating in our company's Return-to-Work/Modified Duty Program.

_____ _____

(Signature of employee) (Date)

Personal Protective Equipment (PPE) Violations At Job Site

for _____

Name of employee: _____

Date of PPE violation(s): _____

Description of violation(s): _____

_____

Job site location: _____

Employee received:

- ❑ Verbal warning
- ❑ Written warning
- ❑ Other: _____

_____
(Supervisor's signature)

This violation and disciplinary action have been explained to me in a language and manner that I understand.

_____
(Employee's signature or witnessed "X")

Translated by: _____

Underground Utility Locate Notification Form

for _____

Name of person filling out log: _____

Signature: _____

Date Utility Called	Job Name/ Ticket Number	Cleared To Start Work: Date/Time

Hazardous Chemicals Inventory Log for _____

Name Of Chemical	Location	Chemical's Use	Msds On File

Defective Equipment Report for _____

Date:_____

Reported by: _____

Equipment (model, type, ID number, etc.)**:**

_____

_____

Defect/repairs needed (be specific)**:**

_____

_____

_____

Any accidents related to above defect(s)?

_____

_____

_____

Report filed: Yes _____ No _____ Date filed:_____

Date repaired: _____

Mechanic's name: _____

Total downtime: Days _____ Weeks: _____

Cost of repairs:

Parts $ _____

Labor $_____

Other (freight, etc.) $ _____

Impact Of Injuries/Illnesses On Profitability

Worksheet on Impact of Injuries/Illnesses

Direct Cost

To calculate the direct cost, determine the total value of an insurance claim for an injury or illness.
$ _____ (Consists of insurance costs and indemnity payments.)

Indirect Cost

To calculate the indirect cost of this injury or illness, multiply the direct cost by a cost multiplier. The multiplier that you use will depend on the amount of the direct cost.

If your direct cost is	Use this cost multiplier
$0–$2,999	4.5
$3,000–$4,999	1.6
$5,000–$9,999	1.2
$10,000 or more	1.1

Direct cost X cost multiplier = indirect cost.

$ _____ X _____ = $_____

Total Cost

To calculate the true cost of the injury or illness, add the direct and indirect costs.

$ _____ + $ _____ = $ _____

Impact on Profitability

To calculate an accident's impact on your profitability, you will use your profit margin to determine the sales your company must generate to pay for the injury or illness.

Divide your total profits by total sales to get your profit margin.

Total profits/total sales = profit margin.

$ _____ / $ _____ = $ _____

Divide the total cost of an injury or illness by your profit margin to determine how much in sales your company must generate to pay for the injury or illness. Keep the profit margin in decimal form (e.g., 0.04).

Total cost of injury or illness/profit margin = sales required to recover cost.

$ _____ / $ _____ = $ _____

Paycheck Stuffer

Use this as an example of how you can make your employees aware of safety issues. Replace the example with one of your own.

What We Value

"We believe in a 'Safety First' approach to every company operation so that we protect the lives and resources of our clients, our associates, and the public."

However, last week, one of our construction crew leaders was grading a site when another employee moved one of our trucks to dump soil. The crew leader was backing up and hit the truck. This resulted in approximately $500 in damage.

Two lessons to be learned from this accident:

1. Always look behind you before backing up.
2. Park vehicles a safe distance away from other machinery.

I have read "What We Value" and have received my paycheck.

_____ _____

(Signature of employee) (Date)

Safety Suggestions Form for _____

In an effort to make our workplace safer, I have these safety suggestions:

1._____

2._____

3._____

4._____

5._____

_____

(Name/signature of employee – OPTIONAL)

_____

(Date)

Please turn this form into your supervisor.

_____

(Below to be filled out by management.)

Safety suggestions reviewed by: _____

(Name/title)

Actions taken:

_____

_____

_____

_____

Date:_____

Formulario De Sugerencias De Seguridad Presentado

A _____

En un esfuerzo por hacer que nuestro lugar de trabajo sea más seguro, le presento las siguientes sugerencias de seguridad:

1._____

2._____

3._____

4._____

5._____

_____

(Nombre/firma del empleado – OPCIONAL)

_____

(Fecha)

Por favor, devuelva este formulario a su supervisor.

_____

(El espacio siguiente es para ser completado por la gerencia.)

Sugerencias de seguridad revisadas por:_____

(Nombre/cargo)

Accciones llevadas a cabo:

_____

_____

_____

_____

Fecha: _____

Recognition Of Safe Practices for _____

I, _____ , observed
(Name of employee observer)

_____ working in a safe manner on
(Name of employee)

_____
(Day of week/date)

Description of the safe practices I observed:

_____

_____

_____

_____

_____

_____

_____

Location/work area where safe practices took place:

_____

_____

_____

_____

_____

_____

_____

_____ _____
(Signature of employee observer) (Date)

(Return this form to your supervisor.)

Reconocimiento Presentado *A* _____
Por El Uso De Prácticas Seguras

Yo, _____ , observé a
(Nombre del empleado observador)

_____ trabajando en condiciones seguras
(Nombre del empleado)

_____
(Día de la semana/fecha)

Descripción de las prácticas de seguridad que observé:

_____

_____

_____

_____

_____

_____

_____

Ubicación/área de trabajo donde las prácticas de seguridad tuvieron lugar:

_____

_____

_____

_____

_____

_____

_____ _____
(Firma del empleado observador) (Fecha)

(Devuelva a este formulario a su supervisor)

Pride Points

☐ One Point ☐ Two Points ☐ Three Points

Comments:

_____

_____

_____

To (First & last name)**:** _____

From: _____ **Date:**_____

Pride Points

☐ One Point ☐ Two Points ☐ Three Points

Comments:

_____

_____

_____

To (First & last name)**:** _____

From: _____ **Date:**_____

Crews of the Month

In an effort to recognize crew leaders and crews that exemplify leadership and teamwork in performing their jobs in a safe and efficient manner, <*Your Company's Name*> will recognize Crews of the Month. Selected crews will have their names posted on the bulletin board in the employee break room and on bulletin boards in other visible areas of the company. Further appreciation will be shown by giving selected crews and crew leaders the following prizes:

Crew leader: _____
(Type of prize)

Crew members: _____
(Type of prize)

Each month, management will select the winning crew leaders and crews based on the following criteria:

Safety:

- ❑ Using required personal protective equipment (PPE) and other safety equipment
- ❑ No damage to company trucks or other equipment
- ❑ No employee injuries
- ❑ No property damage accidents
- ❑ Job sites neat and free of hazards
- ❑ Other: _____

Team Effort and Leadership:

- ❑ Ability of crew leader to supervise
- ❑ Communication and cooperation among crew members
- ❑ Crews offer suggestions to management on improving safety, quality, or efficiency
- ❑ Other: _____

Overall Organization:

- ❑ Trucks clean and in order
- ❑ Organized and leave on time in morning
- ❑ Remember all necessary equipment and tools
- ❑ Other: _____

Quality and Efficiency:

- ❑ Overall quality of job
- ❑ Job done in, or under, allotted time
- ❑ Equipment and personnel used efficiently
- ❑ Other: _____

Integrity Insurance®

Section 6:

Job Site Inspections

Job Inspections

Planned inspections go beyond routine site checks. The result of these inspections should be the establishment of goals for future improvements in areas such as electrical facilities, lockout systems, scaffolding, industrial hygiene, fire prevention, and machine or equipment guarding. These inspections should make use of detailed checklists.

Some areas for such inspections are listed below.

- Warehousing: processing, receiving, shipping, and storage of equipment; layout, heights, floor loads, material handling, storage methods.
- Building and grounds conditions: floors, walls, ceiling, exits, stairs, walkways, ramps, platforms, driveways, aisles, mud and ice.
- Housekeeping: waste disposal, tools, objects, materials, leakage and spillage, cleaning methods, schedules, work areas, remote areas, storage areas.
- Electricity: equipment, switches, breakers, fuses, switch-boxes, junctions, special fixtures, circuits, insulation, extension cords, tools, motors, grounding, NEC compliance.
- Lighting: type, intensity, controls, conditions, diffusion, location, glare and shadow control.
- Ventilation: type, effectiveness, temperature, humidity, controls, natural and artificial ventilation and exhausts.
- Machinery: points of operation, flywheels, gears, shafts, pulleys, key-ways, belts, couplings, sprockets, chains, frames, controls, lighting for tools and equipment, brakes, exhausts, feeding, oiling, adjusting, maintenance, lockout, grounding, work space, location, purchasing standards.
- Personnel: training, experience, methods of checking machines before use, type closing, personal protective equipment, use of guards, tool storage, work practices, methods of cleaning, oiling or adjusting machinery.
- Hand and power tools: purchasing standards, inspection, storage, repair, types, maintenance, grounding, use of handling.
- Chemicals: storage, handling, transportation, spills, disposals, amounts used, toxicity or other harmful effects, warning signs, supervision, training, protective clothing and equipment.
- Fire prevention: extinguishers, alarms, sprinklers, smoking rules, exits, personnel instructed on separation and storage of flammable materials, drainage and spill containment, explosive-proof fixtures in hazardous locations, waste disposal.
- Maintenance: regularity, effectiveness, training of personnel, materials and equipment used, records maintained, method of locking out machinery, general methods.
- Personal protective equipment: type, proper size, repair, storage, assignment of responsibility, purchasing methods, standards observed, training in care and use, rules of use, method of assignment.

Identification and Control of Hazards by Supervisors

To maintain a safe and healthful workplace, we need to do two things:

1. Identify workplace hazards that exist now or could develop.

2. Install procedures to control these hazards and eliminate them if possible.

To begin, each supervisor must remember that this activity will have to be keyed to your workplace - your materials, your processes, your employees, and your production needs.

Once you have identified possible hazards and instituted changes to correct them, you know what your problems are. Now you must ensure that what you did stays done. Once we have instituted any special required controls, or a workplace code of safe practices and operations procedures, then these must be monitored and must be maintained in the future. For this, you will want to use a periodic self-inspection program. How often you should do self-inspections, what types of equipment or procedures you should use, or the exact specifics as to how to obtain the best results will be for you to decide as you go along. You know your workplace best.

Safety & Health Survey Checklist

Project Name & No.: _____ Date Issued: _____ Time: _____

_____ _____

Person Conducting Survey Title:

NOTE: 1. Place "4" mark in appropriate column.
2. All "NO" answers should be explained or result in a suggestion.
3. Line through "OK" and "NO" boxes when not applicable

OK	No	Ref #	
			POSTING OF NOTICES
☐	☐	☐	OSHA 300 up to date/posted
☐	☐	☐	OSHA Posters
☐	☐	☐	Citations posted until corrected
☐	☐	☐	Other Required
			WRITTEN SAFETY PROGRAM
☐	☐	☐	Printed rules and standards
			TRAFFIC CONTROL
☐	☐	☐	Protected equipment, materials and excavations
☐	☐	☐	Warning and no smoking signs, markers and lights
☐	☐	☐	Flagmen, dressed and placed
☐	☐	☐	Control at entrances and exits
☐	☐	☐	Control through construction area
☐	☐	☐	Barricade plan ☐ City ☐ County ☐ State
☐	☐	☐	People traffic control
☐	☐	☐	Barricades adequate
			FIRST AID
☐	☐	☐	Emergency phone numbers posted
☐	☐	☐	First aid certified person
☐	☐	☐	First aid supplies
☐	☐	☐	Eye-body showers for quick drenching
			PERSONAL PROTECTION EQUIPMENT
☐	☐	☐	Eye and face protection
☐	☐	☐	Respiratory protection
☐	☐	☐	Head protection
☐	☐	☐	Foot protection
☐	☐	☐	Safety harnesses
☐	☐	☐	Electrical gloves, sleeves, mats, blankets
☐	☐	☐	Protective equipment well maintained
☐	☐	☐	Lanyards
			FIRE EXTINGUISHERS
☐	☐	☐	Conspicuously located and accessible
☐	☐	☐	Suitable distribution and types
☐	☐	☐	Yearly recharge and tag attached
☐	☐	☐	Clean and properly mounted
			AISLES
☐	☐	☐	Aisles clear, repaired and unobstructed
☐	☐	☐	Sufficient safe clearance
☐	☐	☐	Proper lighting in all work areas

OK	No	Ref #	
			HOUSEKEEPING
☐	☐	☐	Waste material removed promptly
☐	☐	☐	Waste material disposed of safely and regularly
☐	☐	☐	Lumber cleaned and stripped of nails
☐	☐	☐	Control of construction materials and tools
☐	☐	☐	Materials, equipment and tools stored safety
☐	☐	☐	Roadways, walks cleaned frequently
☐	☐	☐	Proper number of toilet/employee
☐	☐	☐	Toilet paper/clean porta-potty
			JOB SITE PREMISES
☐	☐	☐	Precautions taken to protect general public and other workmen
☐	☐	☐	Sidewalk or roadway detours well maintained and lighted
☐	☐	☐	Public protected from overhead hazards
☐	☐	☐	Adjoining property protected from construction hazards
☐	☐	☐	Attractive nuisance hazards protected from children
☐	☐	☐	Area protected from trespassers or unauthorized entry
☐	☐	☐	Exits free, unobstructed and unlocked
☐	☐	☐	Exit route clearly marked
☐	☐	☐	Fire alarm, depending on size, occupancy
☐	☐	☐	Sufficient exit capacity
☐	☐	☐	Visible exit signs
☐	☐	☐	Stairway and floor openings guarded
☐	☐	☐	Platforms, balconies guarded
☐	☐	☐	Floor openings covered and secure
☐	☐	☐	Rebar caps in place
			MOBILE EQUIPMENT
☐	☐	☐	Operators qualified by ability and experience
☐	☐	☐	Equipment in good condition
☐	☐	☐	Proper loading of equipment
☐	☐	☐	Loads properly handled or secured
☐	☐	☐	Area free of overhead obstructions
☐	☐	☐	Equipment properly parked when not in use

Safety & Health Survey Checklist

OK	No	Ref #	
			SCAFFOLDING and LADDERS
☐	☐	☐	Scaffolding, ladders and planks in good condition
☐	☐	☐	Proper and sound materials used
☐	☐	☐	Safe tie-in to building or structure
☐	☐	☐	Scaffolding safely erected and well-maintained
☐	☐	☐	Clear, isolated area maintained below
☐	☐	☐	Adjustable legs on portable scaffold secure
☐	☐	☐	Temporary stairs, ladders, ramps constructed to code
			(Questions? Check with Safety Admin.)
☐	☐	☐	Braces and handrails stable
☐	☐	☐	Proper footing
☐	☐	☐	Kick boards in place
☐	☐	☐	Ladders proper height
☐	☐	☐	Ladders 3 ft. behind access level
			EXCAVATING, TRENCHING, TUNNELING, GRADING
☐	☐	☐	Excavations, trenches, etc. sloped and benched barricaded properly
☐	☐	☐	Soil analysis/competent pers. insp. complete/ documented
☐	☐	☐	Shoring as needed for soil and depth
☐	☐	☐	Public or private roads, walks, supported and protected
☐	☐	☐	Mechanical equipment in good condition
☐	☐	☐	Survey for existing underground installations
☐	☐	☐	Proper control and disposition of materials
☐	☐	☐	Dust controls adequate
☐	☐	☐	Mud and water controls adequate
☐	☐	☐	No danger to adjoining properties
☐	☐	☐	Trenches/holes sloped, benched
☐	☐	☐	Environmental and MSDS
☐	☐	☐	Cans/drums labeled
☐	☐	☐	Catch basin under drums
☐	☐	☐	Competent person on site during trench work
			MACHINES GENERAL
☐	☐	☐	Point of operation guarded
☐	☐	☐	Other hazardous conditions guarded
			HEARING CONSERVATION
☐	☐	☐	Suspected high noise areas tested/documented
☐	☐	☐	Hearing protection in use where needed
☐	☐	☐	Hearing protection readily available
			FLAMMABLE LIQUIDS
☐	☐	☐	Properly stored
☐	☐	☐	Kept in approved containers
☐	☐	☐	Properly labeled
☐	☐	☐	Proper use of flammable materials
☐	☐	☐	Protected in work area
☐	☐	☐	Protected from heat or other ignition source
☐	☐	☐	Warning signs and instruction posted

OK	No	Ref #	
			AIR COMPRESSOR/HYDRAULIC
☐	☐	☐	Equipped with pressure gauge
☐	☐	☐	Safety valve provided and frequently tested
☐	☐	☐	Hose secured to fitting
			WELDING
☐	☐	☐	Hoses and regulators in good condition
☐	☐	☐	Safe storage location and cylinders secured/caps in place
☐	☐	☐	Leads and cable in good condition
			ABRASIVE WHEELS (GRINDER)
☐	☐	☐	Sides guarded
☐	☐	☐	Tool rest and tongue guard adjusted
☐	☐	☐	Proper clearances
			EQUIPMENT
☐	☐	☐	Reverse alarm
☐	☐	☐	Rollover protection (ROPS)
☐	☐	☐	Horns, when applicable
☐	☐	☐	Seat belts/in use
			FORK LIFT
☐	☐	☐	Reverse alarm
☐	☐	☐	Horn
☐	☐	☐	Approved for location
☐	☐	☐	Overhead canopy guard, high lift trucks
			OVERHEAD CRANE (ROLLING and MOBILE)
☐	☐	☐	Safety latch on chain hook
☐	☐	☐	Rated load plainly marked on both sides
☐	☐	☐	Warning device if a traveling type
☐	☐	☐	Proper number of cable clamps
☐	☐	☐	Cable condition
☐	☐	☐	Maintenance records on site
☐	☐	☐	Travel limits set
☐	☐	☐	Load balanced using proper signals
☐	☐	☐	Safety catch on hooks
☐	☐	☐	Operator card on file
☐	☐	☐	Slings not wrinkled, cut, damaged
			CRIME PREVENTION
☐	☐	☐	Equipment and tools property marked with CIN number
☐	☐	☐	Equipment, tools, and materials color-coded
			CONFINED SPACE
☐	☐	☐	Atmosphere tested
☐	☐	☐	Entry permit filed
☐	☐	☐	Stand by person present
☐	☐	☐	Personal protection gear in use

Safety & Health Survey Checklist

OK	No	Ref #	
			ELEVATORS AND HOISTS
☐	☐	☐	Hoisting equipment adequate for use
☐	☐	☐	Inspected frequently and in good condition
			ELECTRICAL EQUIPMENT
☐	☐	☐	Electrical equipment in good condition
☐	☐	☐	Adequately wired and well insulated
☐	☐	☐	Properly fused and grounded
☐	☐	☐	Standard interlock plug connectors used
☐	☐	☐	Temporary lights and wiring adequate and safe
☐	☐	☐	Electrical dangers posted
☐	☐	☐	Proper grounding and use
☐	☐	☐	Flexible cords in good condition
☐	☐	☐	Cover plates, switches, outlets, etc., in good condition
☐	☐	☐	Electric panels clear
☐	☐	☐	GFCI in use, tested, documented
☐	☐	☐	Lockout/tagout procedures followed
☐	☐	☐	All switches properly identified
☐	☐	☐	Tests conducted/documented

OK	No	Ref #	
			HAZARD COMMUNICATION
☐	☐	☐	MSDS on site/easy access for employees
☐	☐	☐	Training certs signed/on file
☐	☐	☐	Complete program on site/easy access for employees
			MACHINES, WOODWORKING
☐	☐	☐	Target saw: no wood cutting blade
☐	☐	☐	Table saw: hood guard, non-kickback, spreader
☐	☐	☐	Radial saw: guarded non-kickback, auto return
☐	☐	☐	Band saw: blade above guide rolls guarded
☐	☐	☐	Control switch convenient to user
☐	☐	☐	Push stick or push blocks available
☐	☐	☐	Circular saw: guards (no shims

Safety/Health Inspection Action Form

Person Conducting Insp./Title: _____ Job Site: _____ Date: _____ Time; _____

Observation:	Action Taken/Required:	Personal Responsible:	Date T/B Comp.:	Date Comp.:	Corrected by:

Comments: (Additional comments on back)

Signature: _____ Date: _____

SAMPLE

Corrective Action Considerations

UNSAFE ACT: Climbing a defective ladder

UNSAFE CONDITION: A defective ladder

The most typical supervisor corrective action is to get rid of the defective ladder! But, the supervisor with safety management training might also ask the following:

1. Why wasn't the ladder found during normal inspections?
2. Why did the employee use the ladder?
3. Was the employee properly trained?
4. Was the job properly planned?

Identifying true causes or management causes would lead you to the following corrective actions:

- Improve inspection procedures
- Improve training
- Improve pre-job planning

The properly trained supervisor will learn to understand that most unsafe acts or conditions are symptoms - not causes.

Section 7:

Hazard Communication

Hazard Communication Overview

According to the Occupational Safety and Health Administration ("OSHA"), approximately 32 million workers are exposed to one or more chemical hazards in the workplace. There are an estimated 575,000 existing chemical products and hundreds of new ones being introduced annually. Exposure to some chemicals may cause or contribute to serious injuries or poor health effects, while other chemicals may be hazardous having the potential to cause fires and explosions.

Because of the seriousness of these safety and health problems, OSHA issued the Hazard Communication Standard ("HCS"), 29 C.F.R. Part 1910.1200, in 1983. The purpose of the HCS, also known as the "Worker Right-To-Know Law," is to reduce the incidence of chemical injuries and illnesses by establishing uniform requirements to make sure that the hazards of all chemicals produced, imported, or used in U.S. workplaces are evaluated and that this hazard information is transmitted to affected employers and exposed employees.

The HCS does not regulate chemicals and their production. Other Federal and State statutes regulate these kinds of activities. Instead, the HCS is designed to convey hazard information to employers by means of labels on containers and material safety data sheets ("MSDS"). Armed with this information and an understanding of the HCS, employers are then required to have a company-specific written hazard communication plan. This plan must spell out who the plan administrator is, provide a listing of potentially hazardous chemicals used in the workplace, and an explanation of MSDS and where they are located in the workplace for review, information on product labeling, and how the employer plans to train employees on how to use or handle hazardous chemicals present in their work areas.

The following information constitutes the Employee Hazard Communication Plan for:

_____

(Name of Company)

Hazard Communication Plan

I. Introduction

We all use chemicals of one kind or another at work and at home. Some of the chemicals we use can cause physical or health hazards if they are used improperly or carelessly. Some chemical hazards are well known. For instance, most people realize that acid burns and that gasoline is explosive. But many hazards associated with chemicals are not common knowledge.

While the exposure to hazardous chemicals pervades our society, perhaps the greatest risk may be in the workplace. Employees in workplaces across the nation are more likely to be unaware of hazardous chemicals to which they might be exposed daily. The Federal Government, therefore, has issued the Hazard Communication Standard ("HCS"), 29 C.F.R. Sec.1910.1200, in order to reduce the risk of hazardous chemical exposure in the workplace. The HCS requires chemical manufacturers, importers, and distributors to evaluate the hazardous nature of their products and to pass this information along to employers and employees who may come in contact with the hazardous chemicals.

Consistent with the HCS, (name of company) has adopted this Hazard Communication Plan ("Plan") as part of its continuing effort to provide its employees with safe working conditions. The purpose of the Plan is to inform employees of chemicals known by the Company to be in their workplaces that may create a hazard if improperly or carelessly used, and to explain safety procedures the Company has adopted to protect employees against the health and physical risks posed by these chemicals.

II. Plan Administrator

The Plan Administrator is _____. All questions or inquiries regarding the Plan or chemicals in your shops and field locations should be directed to the Plan Administrator. If the Plan Administrator is unavailable, contact _____.

III. List Of Potentially Hazardous Chemicals

The Company and the Occupational Safety and Health Administration ("OSHA") in the HCS defines a "hazardous chemical" as any chemical which creates a physical hazard or a health hazard. A chemical is a health hazard if there is statistically significant evidence, based on at least one valid scientific study, that acute or chronic health effect may occur in exposed employees. A chemical is a physical hazard if there is scientifically valid evidence that it is a combustible liquid, compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water reactive. A mixture of chemical products, in some cases, may be tested as a whole to determine whether it is a health hazard or a physical hazard. The results of this testing will determine whether the mixture will be considered a hazardous chemical. If the mixture is not tested as a whole, it will be assumed to be a health hazard if any of the component chemicals comprising at least one percent of the mixture is itself a hazard. If any ingredient accounting for at least 0.1 percent of the mixture is a carcinogen, then the
mixture will be deemed to present a carcinogenic hazard. Any mixture presenting a physical hazard or a health hazard will be labeled as a hazardous chemical and an appropriate Material

Safety Data Sheet ("MSDS") will be maintained with the relevant information (see section IV below).

Because we are not a chemical manufacturer, importer or distributor, the Company is not required to assess the hazards or evaluate chemicals. We shall maintain a list of all the chemical products we use and we shall always evaluate to the best of our ability the potential health exposure of a particular chemical product before we decide to use it.

We have adopted a system under which a member of top management will obtain MSDS from all suppliers of chemical products. This system includes the following:

A. Sending letters to suppliers requesting MSDS.

B. Ensuring MSDS are received and kept current.

C. Maintaining MSDS files that will be available to employees and to local jurisdictional authorities and health or medical officers as required by the regulations.

A list of hazardous chemicals and mixtures known by the Company to be present in your workplace is included in this Plan. The list identifies each chemical or mixture and the work areas in which the chemical or mixture is used or stored. This list will be updated as hazardous chemicals or mixtures are removed from or introduced into your workplace.

IV. Material Safety Data Sheets (Msda)

A. Explanation of Material Data Safety Sheets ("MSDS")

The Company does not produce or manufacture chemicals, but some employees use or are exposed, or potentially exposed, to chemicals the Company purchases or otherwise obtains for use. For each chemical that is hazardous, the Company will keep on file a Material Safety Data Sheet ("MSDS").

This sheet will provide specific information about the chemical, including:

1. the chemical and common name of the chemical substance;
2. the chemical and common name of all hazardous ingredients in the substance;
3. the physical and chemical characteristics of the substance;
4. the substance's physical and health hazards;
5. the manner of contact with the substance that could cause health risks (skin contact, inhalation, absorption);
6. permissible exposure levels;
7. whether the hazardous chemical is considered to be a carcinogen;
8. precautions for safe use and handling;
9. protective equipment and other information ensuring safe industrial use of the chemical;
10. emergency and first aid measures;

11. the name and address of the chemical manufacturer or supplier who prepared the MSDS; and

12. the date the MSDS was prepared.

The Company does not prepare MSDS for the chemicals purchased or obtained. They are prepared by the chemical manufacturers or suppliers from whom the Company obtains chemicals. While the Plan Administrator is responsible for making sure the MSDS is complete, the Company relies on the chemical manufacturers and suppliers to provide accurate and updated MSDS.

B. Plan Administrators Responsible for MSDS

The Plan Administrator is responsible for obtaining the necessary MSDS from the appropriate chemical manufacturers, suppliers, or distributors and for reviewing them to make certain they are complete. The Plan Administrator is also responsible for updating the MSDS when new and significant health information is provided by the supplier. The Plan Administrator will telephone manufacturers and suppliers to obtain MSDS that are not provided to the Company. Telephone calls will be followed by a written request. Copies of all written requests will be kept on file by the Plan Administrator.

If within 30 days after making an initial request for an MSDS, the Plan Administrator's attempts to obtain the MSDS are unsuccessful, the Plan Administrator will enlist the assistance of the regional office to OSHA to obtain the necessary MSDS.

C. Employee Access to MSDS

All MSDS covering hazardous chemical or mixtures known by the Company to be in your workplace will be kept in a notebook in the shops and field locations. Upon request, the Plan Administrator or other designated person will permit employees to review MSDS.

V. Labeling

A. Containers

The Plan Administrator will ensure that containers of hazardous chemicals that are brought into your workplace have labels affixed to them that identify the hazardous chemical in the container and provide appropriate hazard warning consisting of the specific dangers associated with exposure to the hazardous chemical. The Plan Administrator will be responsible for ensuring the labels are legible and prominently displayed. In storage areas where similar chemical products are stored, the Company will post signs or placards to identify the material and transmit the required information in lieu of individual container labels.

If any materials are to be transferred from a storage tank or container through pipes, labels with the required information will be affixed to the line at the discharge point (e.g., dispenser).

B. Employees' Responsibilities

The Plan Administrator is responsible for ensuring that labels are prominently displayed on all containers of hazardous chemicals. In order to maximize employee safety, the employees must assist the Plan Administrator in this task. Employees should take care not to deface or remove warning labels from containers of hazardous chemicals. The labels must remain on the containers and remain legible at all times. Employees should promptly notify the Plan Administrator of missing or defaced labels.

In addition, an employee should not transfer a hazardous chemical from a labeled container to an unlabeled container (pail, bottle, can, etc.), unless the unlabeled container will be under the employee's exclusive control during the employee's work shift. The chemical should not be left in the unlabeled container after the employee leaves work. Employees should not use chemicals they find in unlabeled containers.

VI. Employee Training

A. Employees Who Will Be Trained

All employees who may be exposed to hazardous chemicals under normal operating conditions, or while performing non-routine tasks, or under foreseeable emergencies, will receive initial training on how to use or handle hazardous chemicals present in their work areas safely.

B. Contents of Training Session

Employee training sessions will include specific instruction on:

1. the location of the written hazard communication plan;
2. the location of hazardous materials;
3. the location of MSDS;
4. provisions of the Hazard Communication Standard;
5. detection of the presence or release of hazardous substances – for example, what to look for or smell;
6. the location of information obtained through monitoring or surveys on airborne toxic materials exposure or other similar information on hazardous substances;
7. protecting one's self with appropriate masks, gloves, aprons, respirators, or other protective apparel or devices, and by other safe work practices;
8. the physical and health hazards of the chemicals in their work area;
9. performing non-routine tasks involving hazardous chemicals (such as cleaning up spills) in a safe manner; and
10. the Company's warning label and MSDS system.

C. When Training Conducted

All new and transferred employees will receive training prior to their performing assigned duties in work areas where hazardous chemicals are used or are present. All employees will receive appropriate training whenever a new chemical hazard is introduced into their work area. Training may be lecture, question and answer, or other appropriate delivery methods.

D. Training Log

The Company will keep a log of all training sessions. The log will indicate the date and place the training session took place, the subjects covered during the session, and the name of the trainer and names of those employees in attendance. Employees present at training sessions may be asked to sign a statement indicating they attended the session.

E. Trainer

In addition to the above criteria, the trainer has the following responsibilities. Each time a new employee is hired, prior to commencing his or her duties, training will take place. Additional instructions should be provided to an employee whenever that employee becomes routinely exposed to additional hazardous chemicals, or, because changed conditions require taking special precautions. Also, if an updated MSDS is received indicating a change or additional risk, updating employees' training will also be necessary.

_____ will be responsible for conducting these training sessions and documenting the training log.

VII. Independent Contractors

Independent contractors who are retained by the Company to work in the shops and field locations will be informed by the Plan Administrator, prior to the commencement of their work, of the presence of hazardous chemicals known to be in work areas where the independent contractor will be working. In addition, the Plan Administrator will request independent contractors to provide the Company with MSDS for any and all hazardous chemicals the independent contractor will bring into the workplace to perform his or her tasks. If the independent contractor introduces a new chemical hazard into the workplace, employees in the work area where the new hazardous chemical is used or stored will receive the required training and information set forth in Section VI.

VIII. Emergencies

In the event of any emergency, employees on duty should contract the following individuals:

Designated Company Official	Phone No._____
Company Hospital/Doctor	Phone No._____
Fire Dept./Paramedics	Phone No. 911
Police Department	Phone No. 911

Section 8:

Respirator Safety

Minimal Acceptable Respirator Program Elements

I. Respirator Program Requirements

Selecting the appropriate respirator is only one of the requirements to establish an effective respirator protection program. Before you consider which respirators would be applicable for your needs, you must consider all the factors which impact on proper respirator selection and use.

II. Use Of Respirators Versus Engineering Or Administrative Controls

Whenever possible, respiratory hazards or any other safety or health hazards should be engineered out of the work environment. The safest environment is a hazard free environment. If it is not possible to eliminate or reduce the hazard, or while the hazard is being eliminated or reduced, properly chosen respirators can be an effective way to reduce employee exposures to toxic materials.

Employer Responsibilities: When health hazards requiring respiratory protection are present in the work environment, the employer has the responsibility of developing an effective respirator program. The employer must provide respirators that protect their employee's lives and health, and make sure the employees use the equipment properly.

The respirator program outlined below is based on the requirements established in Section 1910.134(b) of the Occupational Safety and Health Standards (found in Title 29 of the Code of Federal Regulations) for an 11-point minimal acceptable respirator program.

A. Establish Written Operating Procedures

You must develop a formal written document outlining every aspect of your respirator program. Some of the details that must be included are:

1. How contaminants are controlled.
2. How contaminant concentrations are measured
3. How respirators are selected, used, cleaned, inspected, repaired, and stored.

In your written program, you need to discuss instructions and training employees receive, describe fit test procedures, and include plans for emergency situations. In fact, all the remaining 10 points of the minimal acceptable respirator program should be included.

Respirator Program Elements continued**:**

B. Respirator Selection

Proper selection of the respirators shall be made according to the guidance of ANSI Z88.2-1980. In choosing respirators, consider the nature and extent of the hazard, the work requirements and conditions, and the characteristics and limitations of the respirator available. When you examine the hazardous environment, some of the questions you should ask are: What are the contaminants? What are their concentrations? Are they gaseous or particulate? Do they have adequate warning properties? Are they immediately dangerous to life or health? Does the air contain at least 19.5% oxygen? Are protective clothing and hand protection necessary. Choosing the right kind of respirator depends on the answer to these and other questions. If you need help in answering them, respirator manufacturers and distributors are a good resource.

C. Train Respirator Users

Teach respirator users how to select, use, clean, maintain, and store their respirators. Such training must provide the respirator user with an opportunity to handle the respirator, have it properly fitted, test its face piece-to-face seal, wear it in normal air for a long familiarity period, and finally, wear it in a test atmosphere. Every respirator wearer must receive fitting instructions, including demonstrations and practice in how to determine if it fits properly. Keep in mind that respirators cannot be used if anything interferes with the seal of the facepiece to an individual's face. That includes sideburns, beards, temple pieces of eye glasses, severe scars and wrinkles, and even missing dentures.

D. Assign Individual Respirators Where Practicable

When respirators are assigned individually, there is less chance that a worker will use one that doesn't give him or her the best protection. And sometimes, it overcomes the unwillingness of an employee to wear a respirator if he or she thinks someone else has used it, and that it wasn't properly sanitized afterward. When it's not practical to assign respirators individually, you can keep protection and morale high by carefully teaching the users about which model to wear and by explaining how the respirator is to be cleaned and sanitized.

E. Regularly Clean and Sanitize Respirators

Employees will feel much more positive about using the respirators when they understand how much care is taken in cleaning. There is a three-step method of washing the respirator; use a detergent or cleaner-sanitizer, rinse it in warm water, and then air drying it, all outlined in ANSI Z88.2-1980.

F. Respirator Storage

Storing respirators in clean bags or other suitable containers in a clean and sanitary location maintains the integrity of your cleaning and maintenance program.

G. Respirator Inspection and Maintenance

Inspection and maintenance of respirators in accordance with the manufacturer's instruction and maintenance of respirators in accordance with the manufacturer's instructions will ensure that the respirators, when properly used, will give the wearer the best possible protection.

H. Monitor the Work Area

Make sure the right respirator is being used. If there is a change in materials, or processes, in the work area that change the concentration or contaminants, or creates completely new contaminants, you will need to make changes in your respirator program. Even the best respiratory protection program is useless if conditions change and the respirators originally selected are no longer suitable.

Respirator Program Elements continued**:**

I. Continually Enforce and Evaluate the Respirator Program

No matter how well the written standard operating procedures are drawn up, the program can't be effective if it is not enforced. Frequent random inspections should be conducted by a qualified individual to assure that respirators are properly selected, used, cleaned, and maintained. If you find defects in your program, take corrective action.

J. Medical Evaluation of Respirator Wearers

If a potential respirator wearer is not physically able to perform the work using a respirator, the use of a respirator may create more problems than it solves. Work closely with your local hospital to make sure each respirator wearer is physically qualified. (See attached health conditions).

K. Use Approved or Accepted Respirators

The respirators you use in your work environment must be NIOSH/MSHA certified, where applicable, or be otherwise accepted to provide adequate protection for the hazards encountered.

Health Conditions

Employees with any of the following health conditions should not be considered for work requiring a respirator unless cleared by a physician:

1. One Lung;
2. Emphysema;
3. Asthma;
4. Heart disease;
5. Diabetes

Section 9:

Fleet Safety Plan

Fleet Safety Plan

Standard Fleet Vehicle Program for _____

This document provides guidelines and procedures for employees participating in the Standard Fleet Vehicle Program. The policy applies to all employees, spouses, or qualified partners who operate a vehicle provided through the _____ Standard Fleet Vehicle Program. The program applies to all _____ entities, including subsidiaries, affiliates, and operating units.

Objectives

- Ensure that all Company vehicle drivers have a clear and consistent understanding of the policies and procedures related to the Standard Fleet Program.
- Provide fleet drivers with safety, maintenance, and operating standards.

Introduction

_____ purchases all fleet vehicles. We in turn furnish these automobiles to authorized individuals. Company vehicles should be used over personal vehicles for business whenever possible. The day-to-day operations are handled in the Fleet Department, as vehicles that are used for business can be placed in the following categories:

- Fleet – A fleet vehicle is one that is assigned to an employee for both business and personal use
- Pool – A pool vehicle is one that is available for temporary assignment to employees for business
- Rental – A rental vehicle is one that is rented when a fleet or pool vehicle is either not available, or is not the most economical alternative.

One of the most costly and potentially devastating types of loss exposure associated with our day-to-day operations are vehicle accidents. In addition to the potential tragedy of human loss, we are also faced with claims costs that could adversely affect all our operations.

To help prevent and reduce the impact of vehicle accident losses on our organization, we have developed a formal Fleet Safety Program, with this manual as its foundation. The guidelines and activities outlined here have been implemented to help prevent as well as reduce injuries, suffering, and needless waste associated with vehicle accidents. The manual covers the policies and procedures concerning the use of fleet, pool, and rental vehicles.

Responsibilities & Accountabilities

The **Fleet Manager** will oversee the Fleet Safety Program and related operations. These responsibilities include:

1. Administering the program and evaluating its effectiveness
2. Obtain a copy of the driver's license
3. Checking the Motor Vehicle Reports (MVR's) on all employees, their spouses and/or authorized family member, who are assigned or may be using company vehicles, pool vehicles, and rental vehicles. MVR's will be reviewed on an annual basis
4. Bring to the attention of the Driver Safety Committee, all MVR records falling outside of established guidelines
5. Provide driver orientation, training, and remedial training as necessary with verification
6. Provide vehicle upon receiving approved form
7. Ensure maintenance and inspections of company vehicles are being completed as required. Drivers should follow recommendations in the corporate Fleet Driver Manual
8. Provide Certificates of Insurance for all company owned vehicles as needed
9. Actively be involved with accident investigation and analyzing fleet loss exposure
10. Provide updates periodically on safe driving tips to employees
11. Administer recognition and disciplinary programs

The **Driver** will be responsible for:

1. The vehicle (See Fleet Driver Manual)
2. Safety of the cargo and passengers
3. The safety of pedestrians and other motorists
4. Following guidelines after being involved in an accident
5. Providing the Fleet Manager with the appropriate information so that an MVR can be ordered and reviewed for the employee and an authorized family member

Driver **Safety Committee** Responsibilities:

1. Driver and MVR review pursuant to guidelines
2. Accident review and determining corrective action or course of retraining
3. To assist the Fleet Manager with the recognition and disciplinary programs

Driver Eligibility

Driving History

Before an employee can be approved to drive a fleet, pool, or rental vehicle for the first time, he/she must provide the Fleet Manager with the following information on themselves and all authorized family members who may drive an assigned company vehicle:

- A photocopy of his/her current driver's license and those of authorized family members
- A list of all his/her traffic violations and accidents within the past three years
- Any other information deemed necessary

During the course of employment, if a driver has his/her driver's license revoked or suspended for any reason, he/she must notify the Fleet Manager immediately. The Fleet Manager shall be responsible for obtaining MVR's on all regular drivers on an annual basis.

Authorized Family Members

An "authorized family member" is defined as a person satisfying all of the following criteria:

- Lives in the same house as a legal family member who is assigned a fleet vehicle
- Must be a spouse or domestic partner **(NO CHILDREN ALLOWED)**
- Anyone authorized under special circumstances as voted on by the Driver Safety Committee
- His/her MVR does not denote any of the items listed in the guidelines
- Has sent the following to the Fleet Manager:
  - A photocopy of his/her current driver's license
  - A list of all his/her traffic violations and accidents within the past three years

The employee must notify the Fleet Manager of any changes in authorized family members.

Limitations on Use of Company Vehicles

Operation of a company vehicle is restricted to the assigned driver and authorized family member(s) only. Vehicle can be used for personal use as outlined in the driver manual.

Driver Safety Committee

If a driver violates this policy, or if his/her MVR denotes one or more of the items listed below, the Driver Safety Committee will review if the driver should continue to drive a vehicle for conducting company business and to recommend, if necessary, disciplinary action. The committee will consist of the Fleet Manager, a representative from Human Resources, and a representative from Legal.

Driver Safety Committee guidelines:

- The driver is charged with any of the following:
  - Driving while intoxicated or under the influence of drugs
  - Failure to stop and report when involved in an accident
  - Homicide or assault resulting from the operation of a vehicle
  - Driving with a suspended or revoked license
  - Reckless driving
- The driver is required to file SR22 insurance
- During the preceding two years, the driver has had two moving violations
- During the preceding two years, the driver has had two motor vehicle accidents

Driving Restrictions

The driver should not drive a vehicle for business if one or more of the following conditions exist:

- He/she is physically or mentally impaired to a level that would reduce his/her capability to operate a motor vehicle at a safe level (impairments may include but are not limited to, a severe heart condition, poor eyesight, a history of mental disorders, or use of a prescription drug that would adversely impact his/her ability to drive)
- The vehicle is in an unsafe operating condition
- Traveling is unsafe due to severe weather conditions

Traffic Citations

Since the vehicles are registered in the name of *(Name of Company)* it is very important that these cars are not ticketed for overtime parking or other traffic violations. Any fines for such traffic violations must be paid by you the driver, and are not to be submitted for reimbursement on your monthly expense report. These fines should be paid immediately to avoid situations in which the Police Department finds it necessary to bill the company directly.

Employees Using Their Own Car for Company Business

- Only authorized persons are to be passengers in a vehicle operated on company business
- All employees using their personal car on a regular basis for company business shall provide a Certificate of Insurance to the Fleet Manager, and carry a minimum of $500,000 combined single limit coverage (bodily injury and property damage)
- A copy of each employee's driver license should be obtained and his/her MVR reviewed

Driver Safety

It is extremely important that you drive a fleet, pool, or rental vehicle in a safe, professional, and defensive manner.

Driver Training

Driver training is crucial to the success of our objective. Although we will attempt to hire only quality, experienced drivers, drivers training will still be completed. The training will consist of:

1. **Orientation:** When a driver is hired, a complete orientation will be done.
    a. Review of the Fleet Safety Program and Fleet Driver Manual
    b. Discussion of maintenance requirements
2. **Defensive Driving:** Periodic training in the principles of defensive driving will be required for all drivers of company vehicles. Drivers are expected to attend training courses as scheduled. Records of the training will be maintained.
3. **Periodic Specific Training** such as hazards of winter driving, etc. will be provided via video, flyer, or speaker for all drivers presented with such hazards. These will be completed on an as needed basis.
4. **Other Driver Training** may be required of individual drivers by the Driver Safety Committee.

Cellular Phone Use

Do not place calls while the vehicle is moving. Evaluate road and traffic conditions when a call is received and take one for the following actions:

- Do not answer the call if traffic is heavy
- Allow voicemail to answer the call
- If traffic is light, take the call but stop and park safely as soon as possible
- Do not take notes while driving

Do Not Place Or Receive Calls While Refueling The Company Vehicle.

Garaging and Storage

If you have a garage, you are expected to park your fleet vehicle in it without charge to the Company. If a garage is not available, overnight parking should be off-street in a private driveway or parking area adjacent to your home.

If the vehicle is to be stored for any length of time (other than a business trip where it is left at the airport or a close-by airport parking facility), the unit administrator must be notified in order to make potential arrangements for re-assignment of the vehicle.

Policies, Procedures, & Rules

No phase of operations or administration is of greater importance than accident prevention. Highlighted below are some of our policies, procedures, and rules governing the use of fleet, pool, and rental vehicles:

- No **UNAUTHORIZED PERSON** will drive company vehicles. All persons who drive company vehicles will be required to complete the driver selection procedures
- Us of **SEAT BELTS IS MANDATORY** for all drivers and their passengers when in a fleet, pool, or rental vehicle
- Operation of a vehicle while under the influence of **ALCOHOL, ILLEGAL DRUGS,** or a combination of the two is strictly **PROHIBITED**
- Drivers will follow all applicable State/Federal regulations and traffic laws. **FOLLOW THE SPEED LIMIT AND BUCKLE UP!**
- Obey all traffic signs and signals with a full and complete stop
- All drivers are responsible for checking their vehicles for serious mechanical defects every day. If a problem is found, immediately report any unsafe conditions or vehicle problems to the Leasing Manager. Vehicles with problems that could affect the safe operation **WILL NOT BE DRIVEN UNTIL THE CONDITION IS CORRECTED**
- Accidents are to be reported **IMMEDIATELY** to the Fleet Manager. Accident investigation forms are to be completed by the driver at the scene of the accident
- No unauthorized passengers are permitted to ride in a company, pool, or rental vehicle
- Do NOT pick up hitchhikers
- Do NOT leave keys in your vehicle, and secure properly when not in use
- Maintain reasonable distance; allow for speed, road, and weather conditions
- Tailgating will not be tolerated
- Signal well in advance of turning, changing lanes, or stopping
- Reverse and change lanes only when absolutely necessary
- Use the inside lane only when absolutely necessary
- Never contest the right-of way. Always yield to avoid collision
- Adjust for others merging into traffic flow
- Merge into traffic without forcing yourself in
- Do not pass any vehicles at intersections, railroad crossings, or where your vision may be limited
- Tickets and moving vehicle violations are to be reported to the Fleet Manager within 24 hours
- Do not place cellular phone calls while driving. Pull over and park when doing so
- **COMPANY VEHICLES ARE A PRIVILEDGE. TREAT THEM AS IF THEY WERE YOUR OWN!**

REMEMBER – no job is so important and no service is so urgent, that we cannot take the time to do our job responsibly and safely.

Accident Investigation

In the Event of an Accident:

1. Whenever an employee is in an accident, that employee should report the accident to the police and request or obtain a copy of the accident report from the investigating officer. Then notify your immediate supervisor and the Fleet Manager
2. Call emergency services if there is anyone injured in the accident. Render care if possible and only if you are appropriately trained
3. If a minor accident, move you vehicle out of traffic flow. Otherwise, turn off the vehicle and remove the keys.
4. **NEVER ADMIT FAULT IN AN ACCIDENT.** Be cordial and polite
5. Obtain key driver information if another vehicle is involved. Obtain name of other driver(s), company if applicable, passenger name(s), license number, name of insurance and policy number if applicable. Provide the necessary information to the other driver regarding your name, company, and insurance
6. Complete the accident form located in the glove box of the vehicle, and fill in all applicable blanks, complete with diagram
7. Take photographs of the accident scene from different angles
8. Provide copies of the accident form to the Fleet Manager for distribution and review by the Driver Safety Committee
9. Accidents will be investigated and accident forms reviewed by the Driver Safety Committee, and corrective actions developed if necessary. The Driver Safety Committee will determine if preventable or not, along with the root cause of the accident. The main objective of the review committee is to improve the overall effectiveness of the fleet safety program. Some of the items to be considered when completing the accident investigation and review are:

    a. Driver condition
    b. Adverse diving condition
    c. Road conditions
    d. Scheduling (hours behind the wheel)
    e. Vehicle maintenance
    f. Driver training
    g. Other vehicle issues

Vehicle Maintenance

A vehicle maintained in a safe operating condition is one key to accident prevention. Drivers with assigned vehicles are required to have their vehicle serviced and maintained according to the schedules provided within the vehicle maintenance book and the driver manual.

Drivers assigned to specific vehicles will be required to conduct vehicle inspections periodically, to determine if such items as (headlights, horns, back-up lights, turn signals, tires, brakes, and windshield wipers) are working properly, and do not pose a safety threat.

Review the Fleet Driver Manual for information on required maintenance policies.

Policy & Driver Agreement Acceptance

Please Complete The Following:

I _____ have read and understand the Fleet Safety Program and the Policies on the use of vehicles for company business. I further understand that seat belt usage is mandatory and that substance abuse is prohibited while operating any vehicle on company business or while operating a company provided vehicle for personal use. I understand violation of these rules may result in loss of fleet car, disciplinary action, or even termination.

Section 10:

Policy on Drug & Alcohol Abuse

Policy on Drug & Alcohol Abuse

Policy Statement

_____ has established a "Drug & Alcohol-Free" workplace policy. It is the intent of _____ to promote and maintain a workplace free of the problems associated with the use of illegal drugs and alcohol. The health and welfare of all employees and the safe, efficient operation of the company's business must be secured at all times. This policy reiterates the company's approach regarding the work-related effects of drug and alcohol use and the unlawful possession of controlled substances on company premises.

The company recognizes drug and alcohol misuse as a potential safety and security problem and, therefore, will offer support and assistance to any employee actively trying to overcome problems they may have as a result of misuse of drugs and alcohol.

_____Drug & Alcohol Policy is consistent with federal regulations and will be administered in a non-discriminatory fashion.

Purpose

In accordance with management's obligation to comply with government regulations, the company has adopted the following policy for the purposes of maintaining a drug and alcohol-free safe work environment and securing the integrity of the business.

This policy applies to all _____ **employees**, including leased and part-time personnel, consultants and employees of other companies (contractors/sub-contractors) working on company premises.

_____ Policy Is As Follows:

1. The use, consumption, sale, manufacture, transfer, distribution or possession of **illicit drugs or any controlled substances** without prescription on company premises, during company time and during employee break and/or lunch times *is strictly prohibited.* Company vehicles, at any location at any time, as well as private vehicles parked on company premises are included within this prohibition.

   The DOT refers to the restrictions for use of illicit substances (drugs) as a prohibition. Drug prohibitions include the following:

   A. Drivers may not report for duty or stay on safety sensitive functions while using any controlled substance. The only exception to this rule is when a physician prescribes a substance AND has advised that it will not interfere with a Driver's ability to safely operate a motor vehicle.

   B. Drivers may not report for duty or stay on a safety sensitive duty if they have tested positive for a controlled substance.

   C. Drivers cannot refuse to submit to substance testing.

   D. Employers who know about any of the above acts cannot permit a driver to perform safety sensitive functions.

   E. Employers may require drivers to report the use of any therapeutic drugs.

2. The use, consumption, illegal sale, transfer, distribution or possession of alcohol, by an employee on any company premises during company time and during employee break and/or lunch times *are strictly prohibited.*

   Company vehicles, at any location at any time, as well as private vehicles parked on company premises are included within this prohibition.

   The DOT refers to the restrictions for use of alcohol as a prohibition.
   Alcohol prohibitions will include the following:

   A. A driver may not report for duty or stay on duty;
      1. With an alcohol concentration of 0.04 or greater
      2. If in possession of alcohol including any product containing alcohol, regardless of alcohol content
      3. If using alcohol
      4. Within four hours of using alcohol

   B. A driver who has an accident may not use alcohol until post-accident is done or for a period of eight hours, whichever comes first.

   C. Drivers cannot refuse to submit to alcohol testing

   C. Employers who know about any of the above acts cannot permit a driver to perform a safety sensitive duty.

   D. Policy on Drug & Alcohol Abuse continued:

***NOTE: A driver found to have an alcohol concentration of 0.02 or greater but less than 0.04 will not be permitted to perform a safety sensitive function for at least 24 hours. – *Company*- will take action independent of regulations and FHAA authority, which is otherwise consistent with the law. Disciplinary action will be handled as stated below.**

3. Reporting to and being at work with **legally prescribed** or **over-the-counter drugs**, where such use prevents the employee from performing the duties of the job, or poses a safety risk to the employee and/or other persons or property *is strictly prohibited*.

    a. Legally prescribed drugs may be permitted on or in company property, during employee breaks and company time **provided,** the drugs are prescribed by an authorized medical practitioner for current use by the person the drugs were prescribed for.

    b. Employees possessing or using a valid prescription or over-the-counter drug when on company property, etc. **must notify their immediate supervisor, the Human Resources Administrator or another management official** prior to reporting for duty. The employee may be required to leave the work site by management to maintain the safety of the work environment for the employee and others.

    c. Failure to notify a supervisor as required may result in disciplinary action.

Disciplinary Action

Employees must, as a condition of employment, abide by the terms of – *Company*- Drug & Alcohol policy. **Violations of this policy are grounds for disciplinary action, up to and including immediate termination,** and may have legal consequences.

Steps for disciplinary action taken will occur as follows:

1. Any employee found in possession of, selling, purchasing, using or transferring alcohol or any illegal drug on company premises or during company time will be subject to immediate termination.

2. Any employee who is suspected of reporting to work under the influence of alcohol or an illegal drug is subject to an immediate suspension without pay and required to submit to tests deemed necessary as outlined in this policy.

3. Any employee who tests positive, and it is the employee's first offense, will be referred to a substance abuse counselor and remain under suspension without pay until requirements of prescribed treatment are fulfilled. Such employee(s) will be required to sign a "Last Chance Agreement" and be expected to abide by the terms of the agreement.

4. Any employee who refuses to participate in recommended rehabilitation as a result of a positive test evaluation by a substance use counselor is subject to immediate termination.

5. Any employee who refuses to sign a consent form or cooperate in providing a specimen for testing when required under this policy is subject to immediate termination.

6. An employee who refuses to permit *(Company)* to conduct a search or inspection as permitted under this policy is subject to an immediate suspension without pay pending discharge.

Searches

_____ reserves the right to conduct unannounced searches of its property, including but not limited to vehicles, machines, equipment, lockers, tool boxes, work stations, desks, file cabinets and other containers for unauthorized prohibited substances, alcohol and any other intoxicants at any time without employee permission or reasonable suspicion.

Employee Testing Requirements

An employee, to the extent consistent with the applicable regulations, will be required to provide a urine specimen and undergo breath/alcohol testing at the medical clinic of _____ choice for use of a controlled substance and/or alcohol under any of the following circumstances:

1. Prior to employment **(Refusal will result in withdrawal of any job offer)**
2.* If involved in an accident resulting in bodily injury requiring immediate medical attention away from the scene of the accident. (Both the victim and the individual causing the accident will be tested)
3. Upon re-employment following the employee's participation in a rehabilitation program for drug or alcohol dependency/use.
4.* When there are grounds for reasonable suspicion that an employee has used or consumed any controlled substance or alcohol and is unfit for duty. Grounds for reasonable suspicion include the following:

    a. Unusual behavior or conduct
    b. Chronic absenteeism and / or tardiness
    c. Appearance
    d. Slurred or inconsistent speech patterns
    e. Body or breath odor
    f. Drowsiness or falling asleep
    g. Admission of substance and or alcohol consumption

    Grounds for reasonable suspicion must be observable and articulable, and trained supervisors must determine them.

    When grounds for reasonable suspicion exist, the employee shall not be permitted to begin or remain at work. In no instance should the employee be permitted to operate a motor vehicle or any other piece of machinery, or take part in any other safety sensitive operation at the *(Company)* work site or customer work site. Such safety sensitive operations should be guarded from potential hazards at all times.

    Whenever practical, a witness should confirm the observed behavior or symptoms. In all instances, specific written documentation will be required.

    ***Testing requirements listed below specifically pertain to *(Company)* Drivers only, as established by the Department of Transportation:**

    1. **If a driver is involved in a commercial motor vehicle accident.**
    2. **On a random selection basis.**
    3. **As part of any periodic medical examination provided by the company.**

_____ will require all post accident testing for substance and alcohol use as follows:

If a driver is involved in a commercial motor vehicle accident and either

a. The accident involved the loss of human life;
b. The driver receives a citation for a moving traffic violation arising from the accident;
c. Bodily injury occurs which results in immediate medical treatment away from the scene of the accident, or
d. One or more vehicles incurs disability damage requiring the vehicle to be towed from the accident scene.

Alcohol tests are required within 2-8 hours of the accident.
Illegal substance tests are required within 32 hours of the accident.

Policy on Drug & Alcohol Abuse continued:

At the time it is determined that a test for substance use or alcohol consumption is required, the employee should be approached for his/her consent with an explanation for the reason why the test is being requested. **The employee is then obligated to promptly submit to the tests required as soon as practicable.** The test must be conducted as soon as possible by the approved medical facility. **The employee must agree to have the test results released to** _____. The test results will be reported to the Human Resources Administrator and will be handled confidentially.

Procedures for drug and alcohol testing will comply with appropriate state and federal regulations and guidelines. Employee rights concerning testing will be protected and confidentiality will be maintained

Pay

If / when any employee is **suspected,** under the guidelines established in this policy, to have used or consumed alcohol or illegal drugs, that employee will be required to submit to a drug or alcohol test.

Employees who are required to submit to a drug or alcohol test based on suspicion **will not be paid for** their time up to and during the actual collection of the sample.

The employee will be placed on a disciplinary suspension until results and confirmation of the results are received by the Human Resources Administrator. Any employee with a positive test result, provided it is the employee's first offense, will then be referred to a substance abuse professional.

Any employee with negative test results (indicating that the employee is substance free) will be immediately notified to return to work. Those employees will receive full pay at straight time for any time off during the suspension and the suspension will be removed from their record. Any such time off will be regarded as "days worked" for purposes of attendance records maintained at _____.

Identification Of Substance Use & Employee Assistance

Any employee who suspects or knows of a personal substance use problem or potential for a problem may voluntarily talk to the Human Resource Administrator or other management personnel. If an employee, PROVIDING HE / SHE DID NOT COMMIT A VIOLATION OF A _____ RULE PROHIBITING THE USE OF ALCOHOL AND/OR AN ILLICIT SUBSTANCE AS DEFINED IN THIS POLICY, voluntarily notifies a company officer that he/she wishes to obtain a referral for assistance, only then will no disciplinary action be taken against that employee. (No employee shall be subject to disciplinary action by the company for admitting a personal substance use problem if the problem is reported prior to any infraction of any _____ rule or policy.)

The Human Resources Administrator will assist the employee in obtaining a confidential assessment. It will be the responsibility of the employee to follow the prescribed treatment plan and to perform assignments and work to the every day satisfaction of _____. standards, whether under a treatment plan or not. _____ may provide financial assistance. Such financial assistance will be applied to the initial SAP evaluation or recommended treatment, counseling or care thereafter. All other costs will be the responsibility of the employee. _____ will not be responsible or liable for the cost, quality or consequences of any referral to a counselor or treatment center thereafter.

Return to work may be subject to certain employee monitoring conditions. Participation, in itself, in a program for alcohol or drug use, will not jeopardize an employee's job. However, participation will not relieve an employee of the responsibility to perform assigned duties safely and efficiently, and with compliance to this policy. Employees who are referred to treatment will be required to sign a "Last Chance Agreement" and if such agreement is violated, the employee will be discharged.

Employees who undergo voluntary counseling or treatment pursuant to a referral and who wish to continue to work will be allowed time off (without pay) if or when necessary for the period necessary. Any such action by an employee will be kept strictly confidential.

Treatment

As a result of seeking assistance prior to any violation of _____ drug and alcohol policy or if an employee tests positive and it is the employee's first offense, the following will apply:

1. It is mandatory for that employee to be evaluated by a substance abuse counselor chosen by _____within three working days. The employee must sign a release of information to insure that the counselor can discuss the results of the evaluation with the company.
2. If the substance abuse counselor recommends a rehabilitation program including inpatient and/or outpatient treatment, it will be mandatory for the employee to comply and successfully participate in the rehabilitation program including aftercare recommendations. A medical leave of absence will be granted if necessary.
3. Random testing, which is required as a result of any prescribed rehabilitation program, treatment or other program requirements must be complied with.
4. Should the employee incur three unexcused absences from scheduled treatment, meetings, etc. he / she may be terminated for lack of cooperation. An excused absence is one that has been pre-approved by the counselor.
5. After the suspension has been served, return to work will be determined in a conference between the company, the employee and the counselor. _____ will then have the right to require unannounced testing on the employee to ensure that he / she continues successful rehabilitation.
6. The employee is entitled to this benefit only once during his / her employment with _____. A second positive test result will result in termination.

Substance Abuse Professionals

Substance Abuse Professionals (SAP's) will be selected to facilitate the needs in diagnosis and treatment of alcohol and controlled substances-related disorders. (D.O.T.)

Required return to work tests for illegal substances and / or alcohol will be the financial responsibility of the employee.

All follow-up testing for illegal substance and / or alcohol, which is required by a SAP, will be the financial responsibility of the employee.

Policy on Drug & Alcohol Abuse continued:

Definitions & Terms

For the purposes of this policy, the following terms shall have the following meanings:

1. **"Alcohol Use"** means the consumption of any beverage, mixture or preparation, including any medication, containing alcohol.
2. **"Company Premises"** shall include without limitation each facility owned and / or leased by *(Company).* All company parking lots, employee lunch and locker room buildings and vehicles are included.
3. **"Company Time"** shall include all time during which an employee is on company premises or performing work off the premises for the benefit of the company, as a representative of the company. "Company Time" will include the time from which employees punches in or reports for duty at the beginning of their shift through the times they punch out or quit their daily duties at the end of each workday. Lunch breaks are included as company time.
4. **"Legal Drugs"** shall include any substance(s) in which the possession or sale is not prohibited by law, including prescription drugs and over-the-counter drugs.
5. **"Illegal Drug "** shall include any controlled substance in which the possession or sale is prohibited by law.
6. **"Under the Influence of Alcohol"** will mean having an alcohol concentration within the violation range specified by the Dept. of Transportation.
7. **"Reasonable Suspicion"** shall mean suspicion which is based on specific personal observations that trained *(Company)* representatives can identify and describe concerning the employee's appearance, movements, behavior, speech, breath or body odor.
8. **"Safety Sensitive Function"** shall mean functions for operators of commercial motor vehicles (CMV's) as listed under Part 395.2.

Employee Acknowledgment

I, _____, have been given and read a copy of the

_____ Drug & Alcohol Abuse Policy.

I understand that:

* The policy applies to me;

* Confidential, non-punitive help is available to me for any problems I may have with drugs or alcohol if I voluntarily seek help before becoming subject to discipline under *(Company)* policies;

* I am subject to mandatory drug and alcohol testing under the policy;

* I am subject to disciplinary action, up to and including termination, if I

  - refuse to cooperate in or tamper with such required tests;
  - fail to satisfactorily comply with the terms of any mandatory referral to drug/alcohol treatment or last chance agreement;
  - use, consume, sell, buy, manufacture, transfer, distribute or possess illegal drugs or alcoholic beverages during company time and or on company premises as described in the policy;
  - report to work or work while under the influence of alcoholic beverages or illegal drugs;
  - fail to comply with the requirements and guidelines established within the policy.

* I have only one chance to complete any recommended rehabilitation program as a result of testing positive

I understand and agree that my compliance with _____ Drug & Alcohol Abuse Policy is a condition of my continued employment, and I promise to comply with that policy.

_____ _____

Employee Signature Date

_____ _____

Signature of Witness Date

Section 11:

New Employee Orientation Checklist

New-Employee Safety Orientation Checklist

Introducing new hires to the overall importance of safety - and the ways to achieve it - is one of a supervisor's most significant safety responsibilities. Here are essential points to cover in the training. You may want to check them off as you cover them during training, so that you won't miss any. The list can also be distributed to trainees as a continuing reminder once they're on the job.

On-the-job safety is important to every worker and to the company. It:

- ☐ Reduces the risk of injury or illness
- ☐ Enables the company to comply with extensive federal and state safety regulations
- ☐ Protects the community's air, water, and safety by preventing or responding quickly to emergencies like fires, explosions, and spills
- ☐ Requires alert, trained employees who take responsibility for preventing unsafe acts and conditions.

Company commitment to safety is demonstrated by:

- ☐ Training programs
- ☐ Investments in safe systems and equipment (ventilation systems, machines with guards, etc.)
- ☐ Personal protective equipment
- ☐ Safety incentive and awards programs (include if your company uses them).

To respond immediately and properly to emergencies, you must know:

- ☐ How to recognize and turn in alarms
- ☐ Whom to contact in an emergency/where numbers are posted
- ☐ Where to find and how to use appropriate fire extinguishers
- ☐ Which emergencies must be handled by trained people
- ☐ Where to go and what to do in an emergency (evacuation routes, etc.)
- ☐ Where to find and how to use first-aid kits, eye washes, and showers,

Make these good common sense safety practices part of your everyday routine and thinking:

- ☐ Keep the work area neat and free of hazards
- ☐ Learn the hazards of the equipment and procedures you use on the job
- ☐ Learn about - and use - the protective equipment and procedures called for in your job
- ☐ Participate actively in safety training and safety meetings
- ☐ Report any accident, injury, or illness immediately
- ☐ Inspect tools and protective equipment before use
- ☐ Reporting any defective, malfunctioning, or suspicious tool, machine, or item of protective equipment immediately
- ☐ Never run, fool around, or ignore safety rules
- ☐ Ask questions about any hazard, policy, or procedure you aren't sure about
- ☐ Build safety awareness and alertness - "better safe than sorry"
- ☐ If you are under 18 years of age you can NOT operate machinery or equipment.
- ☐ Make safety *your* responsibility.

- ☐ Initial job assignment: _____

Employee Signature: _____ **Date:** _____

Supervisor Signature: _____ **Date:** _____

Integrity Insurance®

Section 12:

Lockout Tagout Safety

Purpose: To provide the minimum requirements for the lockout or tagout of energy isolating devices whenever work is performed or servicing is done on building equipment, machinery, and vehicles. The following procedures shall be used to ensure that machinery and equipment is stopped, isolated from all potentially hazardous energy sources, and locked out before _____ employees perform any servicing or maintenance where the unexpected energization, start-up of machinery or equipment, or release of stored energy could cause injury.

Policy: _____ provides a safe and healthful work place for all employees through the establishment of rules, procedures, and programs that are strictly enforced in all work situations. This procedure covering the maintenance of energized machinery, equipment, and vehicles shall be adhered to by all _____employees during work on such equipment.

Procedures:

Notification:

The _____ employee qualified to maintain or service affected equipment, should notify the appropriate person(s) at the facility that the affected equipment will be shut down and locked out to perform the planned work.

Deactivation:

The employee shall deactivate the machinery or equipment to be worked on by shutting it down using normal stopping or deactivating procedures. This may be accomplished by depressing a stop button, turning an on/off switch, closing a valve, or turning off and removing keys from the vehicle or heavy equipment.

Final deactivation and isolation shall be accomplished by opening the service-disconnect switch, or valve, and applying a locking device. Some equipment may be deactivated and isolated by removing a fuse, removal and securement of the electrical plug, or removal of vehicle keys.

Only properly trained personnel shall be allowed to deactivate equipment when there is exposure to energized electrical components such as fuses, capacitors, electrical leads on motors, etc. No other personnel will be allowed to isolate or deactivate equipment that exposes them to energized electrical components. Appropriate safety precautions shall be taken such as the use of eye and face protection when working around energized electrical components. Generally, electrical work that may expose employees to energized electrical components is performed by qualified _____ mechanics.

Isolation:

Electrical:

After the equipment has been deactivated using normal methods to shut it down, electrical power shall be isolated from the machinery or equipment by shutting off the source of electrical feed by opening (turning off) electrical service disconnects, shutting switches off at the motor control center, opening the appropriate circuit at the circuit breaker panel, or simply by removing the electrical plug from the outlet.

Most newer equipment is furnished with a lockable service disconnect. Some equipment is equipped with plug type connections and procedures for that equipment follows. All service disconnect furnished equipment should be identified through a marking system that corresponds to identical markings on the service disconnect for the equipment.

Pneumatic & Hydraulic:

Equipment that operates with pneumatic energy must be isolated by disconnecting the source of air by closing valves to the equipment or by uncoupling or disconnecting air hoses or lines from the equipment to be serviced. Airlines that are not equipped with shrade or other quick disconnect type connections must be removed with caution. Air pressure should first be bled from all non-quick disconnect type hose or airline connections to prevent injury to the employees disconnecting lines under pressure. Hydraulic systems should be isolated by shutting off power to pump systems and in some cases, removing stored pressure within hydraulic lines and cylinders.

Lockout:

Once electrical power to the machinery or equipment has been isolated, a lock shall be placed through the switch, hasp, or handle to prevent unauthorized activation of the machinery or equipment. If the equipment is plug connected, a device may be placed over the plug end and a lock placed on the device to prevent persons from plugging the machine or equipment into an outlet before servicing or maintenance has been completed, however the locking out of plug type connections is not required.

The employee performing maintenance shall be the only individual in possession of the key for their lockout lock. A multiple locking hasp must be used when more than one person is working on the machine or equipment, including any subcontractors that may be working on equipment.

Tagout:

If isolation of electrical power to machinery or equipment can only be accomplished through removal of an electrical power cord or removal of electrical leads or fuses, the plug end of the equipment, or fuse panel, shall have a tag fastened to it warning not to plug back in until cleared by the person performing work on the machine or equipment. AT NO TIME shall a tag be removed from machinery or equipment without first checking with the person(s) working on the equipment in question.

Eliminate Stored Or Residual Energy:

Stored or residual energy may be present in piping systems, pneumatic systems, hydraulic systems, and electrical systems. This stored pressure must be protected by grounding, blocking, or bleeding down. Extreme caution must be exercised when removing or blocking residual energy to prevent contact with electrical sources or moving components.

Proper line breaking procedures must be followed to avoid contact with fluids or air under pressure, especially those systems that contain potentially hazardous chemicals, such as chorine and other water treatment chemicals.

Electrical:

Caution must be exercised when working near electrical components, which are capable of storing energy. Such components include capacitors that are capable of storing high voltage for extended periods of time long after the source of electricity has been disconnected. Only qualified employees should work on electrical components or systems. Capacitors should be carefully bled to ground to remove stored energy.

Lockout Tagout Safety continued:

Pneumatic:

Equipment that is powered by pneumatics (air pressure) is capable of storing energy in the form of unreleased air pressure. Air cylinders on this equipment can store air pressure long after airlines and hoses have been removed and compressors shut off. This equipment could accidentally be activated with this remaining air pressure in actuating cylinders contained in the equipment. The air contained in these cylinders should be bled off, or the pump or machine should be cycled until the air has been exhausted in the cylinder.

Hydraulic:

Equipment that is powered by hydraulics (fluid pressure) is capable of storing energy in the form of unreleased hydraulic pressure. Piping and hydraulic cylinders can store energy after hydraulic systems have been shut down. The equipment could accidentally be activated with this remaining hydraulic pressure, or the servicing employee could be injured, by the rapidly escaping hydraulic pressure contained in hydraulic lines and cylinders.

Verify Isolation Of Equipment:

Isolation of the equipment must be verified by attempting to start or operate the equipment by normal starting or operating procedures. Prior to any attempt to start the equipment, first verify that no other persons are exposed to the hazard of the equipment being started. This includes checking all areas around the equipment or machine to be serviced. Deactivation and isolation of the equipment shall be verified by pressing or turning start buttons and switches, or other controls on the equipment. Equipment should not operate, cycle, or drift when controls are operated. Once isolation of the equipment has been verified, return all operating controls and switches to the neutral or off positions.

Restoring Equipment To Service:

The servicing employee shall check the machine or equipment and ensure that the machine or equipment components are operationally intact, including the reinstallation of all machine or equipment guarding. There should be no exposed electrical components, or other hazardous moving parts such as gear drives or transmissions that could injure employees during start up. The servicing employee shall verify that all employees have been safely positioned or removed from the area when the equipment is re-energized and initially operated. Once the process equipment has been restored to service and re-energized, verify that the machine or equipment controls are in the neutral or off position or in the correct position for normal treatment plant operation.

Remove Locks And Tags From Machinery And Equipment:

The servicing employee responsible for completing work on the affected machine or equipment shall be responsible for removing all locks and tags under his control. AT NO TIME shall another person remove the lock or tag from equipment being worked on by another employee. Removal of a lock or tag by a person, other than the servicing employee, may be performed by a manager only after an attempt has been made to locate the original servicing employee.

Notification:

The servicing employee shall notify the affected person(s) that maintenance or repair work has been completed on the affected equipment or machinery and that the equipment can now be safely placed into service or operated and used. Failure of the servicing employee to notify the operator or department that work has been completed on the equipment is a safety violation.

Periodic Inspection Of Lockout Procedure:

A designated _____ manager shall periodically conduct an inspection where the lockout/tagout procedure is being used to determine if the procedure is being used correctly. The results of the audit shall be in writing and shall be maintained in file. The date, equipment being maintained, names of employees involved in the maintenance and the name of the person performing the inspection shall be documented.

Enforcement Of Lockout And Tagout Procedures:

The following actions will be considered serious safety rule violations subject to disciplinary action, including possible termination:

- Removing a lock or tag from machinery or equipment if the lock or tag being removed is not their own.
- Operating, or attempting to operate, equipment, which has been locked out or tagged, out for maintenance or repair.
- Servicing employees that do not remove their lock and tag immediately after work has been completed, unless there is some specific reason that the equipment should not be returned to service.

Training

All _____ employees affected by this lockout/tagout procedure shall receive initial training and annual refresher training. The purpose of the training shall be to ensure that the knowledge and skills required for the safe application, usage, and removal of energy controls are communicated to affected employees. The level of training for servicing employees must include the actual procedures necessary to safely deactivate, lockout, and repair affected facility and building equipment and machinery.

The content of the training program shall include the following:

- The recognition of applicable hazardous energy sources, the type and magnitude of the energy source available in the work area, and the methods necessary for energy isolation and control.
- The application and use of this lockout/tagout procedure and machinery and equipment specific procedures.
- The penalties for violation of this procedure.

Summary of Lockout/Tagout Requirements

1. **NOTIFY** all affected personnel that equipment will be shut down for service

2. **DEACTIVATE** the machine or equipment by shutting down through normal methods

3. **ISOLATE** the machine or equipment by removing the source of energy

4. **LOCKOUT/TAGOUT** by placing a lock & or tag on the isolation switch or device

5. **REMOVE** stored energy by grounding or bleeding residual or stored energy

6. **VERIFY** isolation of equipment by attempting to start it using normal methods

7. **RESTORE** equipment to normal safe operating condition including any guarding

8. **REMOVE** locks and tags from affected machine or equipment

9. **NOTIFY** the operator or other employee that work on equipment is complete

Integrity Insurance®

Section 13:

Bloodborne Pathogens Program

Bloodborne Pathogens Program

Responsibilities

Management:

Management at _____ has the responsibility to properly train all employees who are covered by the scope of this procedure. _____ may coordinate training efforts with outside services to satisfy the requirements of OSHA's standard.

Employees:

Employees who are covered by the scope of this procedure have the responsibility to comply with applicable practices and guidelines. Although the standard is targeted primarily for the health care industry, OSHA does include industrial settings where the possibility of exposure to employees to infectious body fluids might exist. At _____, the possibility for such exposure is very minimal, however, the preparedness to respond to emergency situations involving employee injuries does exist, and, therefore, employees who are trained to respond to such situations shall be thoroughly instructed in the hazards of exposure to bloodborne pathogens.

This procedure covers all employees who, as the result of responding to an employee injury situation on the job, have the potential to come in contact with blood or other potentially infectious materials. In general, the employees of _____ who are covered by procedure are as follows:

1. Personnel with safety responsibilities
2. Any employee or group of employees trained to perform basic first aid or CPR

Objectives:

The objectives of this program include defining bloodborne pathogens and identifying and describing the means by which infectious materials can be transmitted. The measures recommended for the protection and exposure prevention of employees from bloodborne pathogens will be explained by educating employees of dangers associated with occupational exposure to blood and other potentially infectious materials. The intent of this program is to protect employees from the risks and hazards associated with the exposure to bloodborne pathogens.

Definitions:

Bloodborne Pathogens are pathogenic microorganisms in human blood that can cause disease in humans. Two specific diseases of great concern in this regard are the hepatitis B virus (HBV) and the human immunodeficiency virus (HM - HIV is the virus that causes AIDS (Acquired immunodeficiency Syndrome). HBV causes Hepatitis B, which is a serious disease.

Other potentially infectious materials include human body fluids such as semen, vaginal secretions and cerebrospinal fluid. Other body substances such as urine and vomit are not included unless they contain visible blood.

Bloodborne Pathogens Program continued:

Infections from these materials are not spread by casual contact in the workplace. However, precautions need to be taken against contact with them. Occupational transmission of HIV is relatively rare, but the lethal nature of HIV requires us to take every possible measure to prevent exposure. Because there is no population that is risk free to HIV or HBV infectivity, any employee who has the potential to an occupational exposure to blood or other potentially infectious material is included within the scope of the OSHA standard.

The following definitions provide further clarification of some of the terms found in this program.

1. "Blood" means human blood, products made from it, and human blood components.
2. "Bloodborne Pathogens" means While HBV and HIV are specifically Identified 'in the standard, the term includes the pathogenic microorganism that is present 'in human blood and can cause disease in persons who are exposed to material containing the pathogen.
3. "Contaminated" means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.
4. "Decontamination" means the use of physical or chemical means to remove, inactivate or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.
5. "Engineering Controls" means controls that isolate or remove the bloodborne pathogens hazard from the workplace.
6. "Exposure Incident" means a specific eye, mouth or other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of duties.
7. "Licensed Healthcare Professional" means a person whose legally permitted scope of practice allows him/her to independently perform Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up as provided in paragraph (f) of the OSHA standard.
8. "HBV" means hepatitis B virus
9. "HIV" means human immunodeficiency virus
10. "Occupational Exposure" means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.
11. "Other Potentially Infectious Materials" means:
    a. The following human fluids: semen, vaginal secretions, cerebrospinal fluid, amniotic fluid, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;
    b. Any unfixed tissue or organ other than intact skin from a human, living or dead; and
    c. HIV-containing cell or tissue cultures, organ cultures and HIV or HIV-containing culture medium or other solutions.
12. "Parenteral" means piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts and abrasions.
13. "Personal Protective Equipment" means specialized clothing or equipment worn by an employee for protection against a hazard.
14. "Source Individual" means any individual whose blood or other potentially infectious materials may be a source of occupational exposure to an employee.
15. "Sterilize" means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospore.
16. "Work Practice Controls" means controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

Modes of Transmission:

Transmission of infectious microorganisms can be greatly controlled. There are four ways transmission can occur; contact, airborne, vehicular and vector modes of spread.

Vector transmission involves the transmission of pathogens via insect, animal or plant vectors. Vector borne diseases are not of major significance in the U.S.

The transfer of infectious agents through vehicular means is not a common event. Nonetheless, it can and does occur. Examples include food borne outbreaks such as cholera and hepatitis A. However, as with vector transmission, the vehicular spread of disease is relatively uncommon in the U.S.
The airborne route is another mode of transmission. Several diseases are spread in this manner, the most notable being tuberculosis. Diseases such as measles, mumps and chicken pox can be spread this way. Control of the airborne spread of disease usually involves good ventilation patterns and caution when coming into close proximity with infected individuals.

The major mode of disease transfer involves contact transmission. This takes place either through (a.) direct person to person physical contact, such as with unwashed hands, etc. (b.) indirect contact as the result of contact with some contaminated intermediate object such as equipment, solutions, etc. or (c.) droplet spread which involves contact with exhaled respiratory secretions through such means as sneezing or coughing. These various forms of contact transmission account for numerous types of infectious complications including herpes, infections, influenza, etc. Control of contact transmission is simply achieved. With the use of caution, and the presence of awareness, contact transfers can avoided.

OSHA's Role In The Bloodborne Pathogens Standard:

The Occupational Safety and Health Administration (OSHA) was established by the U.S. Congress to assure that industries provided a safe and healthy work environment to all their employees.

Through OSHA regulations employers are expected to comply with established guidelines and work practices to serve as a means of protecting the U.S. work force.

The OSHA standard involving bloodborne pathogens is one of a great diversity of written safe work practice guidelines. However, its primary focus is on the prevention of spread of diseases through the risks and hazards associated with harmful, contaminated human body fluids. The standard presents a strategy by which the prevention of such contact or transmissions should be approached. It is referred to as the exposure control plan and is basically divided into six broad categories. These categories are as follows:

1. Exposure determination
2. Universal Precautions
3. Engineering and work practice controls
4. Hepatitis B prophylaxis
5. Training and education
6. Record keeping

It is the intention of \\\\\\\\\\\\\\\\\\\\\\\\ to implement and comply with the guidelines established in the OSHA standard for bloodborne pathogens. All that is contained within this bloodborne pathogens exposure control plan will be strictly enforced to ensure that contact with bodily fluid does not occur.

Exposure Control Plan:

Exposure Determination:

OSHA requires that employers conduct an "exposure determination" which identifies those jobs and tasks in which occupational exposure may occur. Persons holding such jobs include personnel who are responsible for safety functions and any person(s) trained in basic first aid and CPR. These _____ personnel will receive the training and protective equipment as well as be offered vaccinations as required by the OSHA standard. These employees will be trained by the program administrator to the details of this procedure as required.

Universal Precautions and Control Methods:

In the event an emergency response to an employee injury at _____ occurs, it must be assumed that every direct contact with body fluids is potentially infectious. Therefore, responders shall take such precautionary steps as though such body fluids were HBV or HIV infected. In this context, occupational exposure can be defined as reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood, blood-tinged body fluids or other potentially infectious materials.

The _____ Exposure Control Plan includes using work practice controls as well as enforcing the use of Personal Protective Equipment. It is important that affected employees observe the basic rule of exposure control known as "Universal Precautions." This requires that, in those situations where differentiation between body fluid types is difficult or impossible, all body fluids must be considered potentially infectious materials. Work practice controls as well as the use of appropriate personal protective equipment is essential.

Engineering And Work Practice Controls:

Work practice controls are alterations in the manner in which a task is performed in an effort to reduce the likelihood of exposure to blood or other potentially infectious materials. Work practice controls address two specific areas; Housekeeping and Waste disposal.

Housekeeping rules at _____ require that all first aid areas be kept clean, orderly and 'in a sanitary condition at all times. All procedures 'involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing and spraying. Housekeeping personnel (i.e. janitorial personnel, etc.) must be instructed in proper precautionary measures. Initial clean up of blood or other potentially infectious materials shall be followed with the use of an approved disinfectant chemical germicide or a solution of other acceptable disinfectant material.

Waste (i.e. blood soiled bandages, cloth, etc.) disposal shall be in accordance with applicable Federal, State and local requirements. All infectious waste shall be placed 'in closable, leak-proof containers or bags that are color-coded, labeled or tagged as potentially infectious. All bins, pans, cans and similar receptacles intended for re-use which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

Bloodborne Pathogens Program continued:

Work Rules:

Where first aid treatment to injuries where blood or other potentially infectious material is present, or where there is reasonable likelihood of exposure to body fluids, eating, drinking, smoking, applying lip balm or cosmetics and handling contact lenses shall be prohibited.

Hands and other skin surfaces must be washed with soap and water after removing gloves or other PPE as soon as feasible if contaminated with blood or other body fluids. The use of gloves does not preclude the necessity for hand washing. When hand-washing facilities are not available, antiseptic hand cleansers or towelettes will be made available to affected personnel

Equipment which may become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless it can be demonstrated that decontamination of such equipment or portions of such equipment is not feasible. In this event, a readily observable label shall be attached to the equipment stating which portions of the equipment remain contaminated. This information shall be conveyed to all affected employees, the servicing representative and/or the manufacturer, as appropriate, prior to handling, servicing or shipping to ensure that appropriate precautions are taken.

Contaminated laundry shall be contained at the site of use and shall be handled as little as possible. It must be placed in bags, which prevent leakage and must be labeled or color-coded to identify hazards to employees.

Reusable containers (trash cans, etc.) shall not be opened, emptied or cleaned manually or in any other manner that would expose employees to the risk of contact.

Personal Protective Equipment:

This exposure control plan requires the use of specific Personal Protective Equipment (PPE) as it applies. Specialized clothing or equipment must be used by workers to protect themselves from direct exposure to blood or other potentially infectious materials. For purposes of this procedure, PPE will include, but not be limited to the following: gloves, face shields or masks, eye protection, fluid-resistant aprons or gowns, head and foot coverings, resuscitation bags, pocket masks or other ventilation devices.

Personal protective equipment Items are to be used as intended, and written warnings, directions or instructions accompanied by such items must be observed.

PPE will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through, to, or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used. If a garment is penetrated by blood or other potentially infectious materials, the garment shall be removed immediately or as soon as feasible. All potentially contaminated personal protective equipment should be removed immediately, or as soon as possible upon leaving the work area and placed in an appropriately designed area or container for storage, washing, decontamination or disposal.

Communication Of Hazards:

Communication of all potential hazards associated with bloodborne pathogens shall be conveyed through routine employee training. Training topics and agenda are described later in this procedure.

All potentially contaminated personal protective equipment and biological waste containing materials (i.e. soiled bandages, garments, etc.) shall be placed in containers that will be identified by means of labels or other markings on the exterior of the container. All infectious waste shall be placed in closable, leak-proof containers or bags that are color-coded, labeled or tagged as potentially infectious. Labels or other means of identification will display the following: “DANGEROUS: BIOLOGICAL HAZARD”. Such containers, bags or other means of containing biological wastes will be disposed of in accordance with applicable federal, state and local laws.

Vaccination, Post Evaluation and Follow-up:

Vaccinations shall be given under the supervision of a licensed health care professional according to standard medical practice. The health care professional responsible for the employee's Hepatitis B vaccination shall be provided with a copy of the OSHA Bloodborne Pathogens standard.

For those employees who have occupational exposure, the vaccinations shall be given after the employee has received the training and education that is provided within ten days of initial assignment unless one of the following applies:

1. The employee has previously received the complete hepatitis B vaccination series
2. Antibody testing has revealed that the employee is immune
3. The vaccine is contraindicated for medical reasons

In no case shall participation in a prescreening program be made a prerequisite for receiving hepatitis B vaccinations. If an employee initially declines hepatitis B vaccination but at a later date, while still covered under the OSHA standard, decides to accept the vaccination, the hepatitis B vaccinations will be made available. Those employees who decline to accept the hepatitis B vaccination must sign a statement to that effect. A copy of this form can be found at the end of this procedure.

The source patient(s) shall be notified of the incident and an attempt will be made to obtain consent to collect and test the source's blood in order to determine the presence of HIV and/or HBV infection. A blood sample shall be collected from the exposed worker as soon as possible after the exposure incident for determination of HIV and HBV status, subject to legal regulations.

Rules For Handling Exposure Incidents:

The rules for handling exposure incidents as prescribed by OSHA will apply as follows:

1. Immediately following a report of an exposure incident, a confidential medical evaluation and follow-up shall be made, including at least the following elements:
   a. Documentation of the route(s) of exposure
   b. Circumstances under which the exposure incident occurred
   c. Identification and documentation of the source individual unless it can be established that identification is infeasible or prohibited by state or local law
   d. HBV and HIV status of the source patient(s) if known and if permitted by law

Bloodborne Pathogens Program continued:

2. The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, it must be established that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source's blood, if available, shall be tested and the results documented.

3. When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.

4. Results of the source individual's testing shall be made available to the exposed employee and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

5. The exposed employee's blood shall be collected and tested as soon as feasible after consent is obtained.

6. If the employee consents to baseline blood collection, but does not give consent at that time for HIV testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be preformed as soon as feasible.

7. When medically indicated, there shall be post-exposure prophylaxis as recommended by the US Public Health Service as well as counseling and evaluation of reported illnesses.

8. The healthcare professional evaluating the employee after an exposure. Incident will be provided with the following information:
   a. A copy of the OSHA Bloodborne Pathogens standard.
   b. A description of the exposed employee's duties as they relate to the exposure incident.
   c. Documentation of the route(s) of exposure and circumstances under which the exposure occurred.
   d. Results of the source individual's blood testing, if available; and all medical records relevant to the appropriate treatment of the employee.

9. A copy of the evaluating healthcare professional's written opinion shall be obtained within 15 days of the completion of the evaluation.

10. The healthcare professional's written opinion for Hepatitis B vaccination shall be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.

11. The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:
    a. That the employee has been informed of the results of the evaluation; and
    b. That the employee has been told about any medical condition resulting from exposure to blood or other potentially infectious materials which requires further evaluation or treatment.

12. All other findings or diagnoses shall remain confidential and shall not be included in the written report.

13. Medical records required by the OSHA Bloodborne Pathogens standard shall be maintained in accordance with the requirements of the OSHA standard on Access to Employee Exposure and Medical Records, 29 CFR1910.20.

Bloodborne Pathogens Program continued:

Training and Education of Employees:

All employees with occupational exposure potential shall participate in the _____ training program on bloodborne Pathogens. The training will be provided as follows:

1. At the time of initial assignment to tasks where occupational exposure may take place (i.e. first aid response to employee injuries, etc.)
2. Annually thereafter
3. Additional training shall be provided when changes such as modification of tasks or procedures or instructions of new tasks or procedures affect the employee's occupational exposure (i.e. an employee is newly trained on first aid and/or CPR

The training program shall contain at a minimum the following elements:

1. A copy of OSHA's Bloodborne Pathogens standard and an explanation of the Emergency Medical Technician's contents
2. A general explanation of the epidemiology and symptoms of bloodborne disease
3. An explanation of the modes of transmission of bloodborne pathogens
4. An explanation of the _____ Exposure Control Plan and the means by which the employee can obtain a copy
5. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials
6. An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate work practices and personal protective equipment
7. Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment
8. An explanation of the basis for selection of personal protective equipment
9. Information on the Hepatitis B vaccine, including information on the effectiveness, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge
10. Information on the appropriate actions to take and person to contact in an emergency involving blood or other potentially infectious materials
11. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available
12. Information on the post-exposure evaluation and follow-up that _____ is required to provide for the employee following and exposure incident
13. An explanation of the signs and labels and/or color coding required by the OSHA Bloodborne Pathogens standard used to identify the presence of an actual or potential biological hazard
14. Means by which hazards will be communicated to employees that have the potential to exposure of infectious materials
15. An opportunity for 'interactive questions and answers with the person conducting the training sessions

Bloodborne Pathogens Program continued:

Training records will be maintained for three years from the date on which the training occurred and will include the following:

1. Dates of training
2. Contents or summary of training program, including the trainer's name
3. Job titles and names of all persons attending the training sessions

Record keeping:

An accurate record of each worker's reported exposure incident to blood or other potentially infectious material shall be established and maintained in accordance with applicable OSHA record keeping regulations. Such records shall be kept confidential and shall not be disclosed or reported to any person within or outside the workplace without the employees expressed written consent except as may be required by law or OSHA regulation.

Exposures shall be included on the OSHA 300 occupational injury and illness log if medical treatment, such as gamma globulin, is administered by licensed, medical personnel.

HBV and HIV shall be recorded on the OSHA 300 log if the illnesses can be traced back to an occupational injury or other exposure incident on the job. Medical records will be kept for each employee with occupational exposure for the duration of employment plus 30 years. Records will be maintained of Hepatitis B Vaccination status (including all dates) on all employees for the duration of employment *plus 30 years* as well. The medical records that will be maintained will include the results of any examinations, testing results and follow-up procedures, as well as a copy of the health care professional's written opinion and a copy of the information that is provided to the health care professional (if applicable).

The employee medical records shall include:

a. The name and social security number of the employee
b. A copy of the employee's Hepatitis B Vaccination status including the dates of the Hepatitis B vaccination and any medical records relative to the employee's ability to receive vaccinations
c. A copy of all results of examinations, medical testing, and follow-up procedures
d. The employee's copy of the health care professional's written opinion
e. A copy of the information provided to the health care professional

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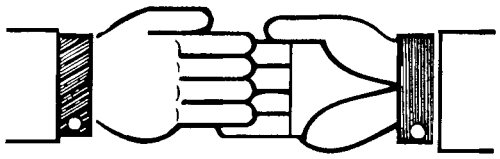
Section 14:

Tool Box Talks Safety Tips

Tool Box Talks Safety Tips

Welcome to your new job. At this company, safety is priority #1.



As you review this *Safety Selection*, you should understand that your new employer is serious about safety. Because you are new, with new surroundings, and new coworkers, it is a perfect time to learn and practice safe work habits. Beginning today, make it clear to everyone that you are serious about safety. Study these safety rules. They will help you become a safety conscience employee, and ensure your worksite is a safer place for all.

Responsibilities—Your new employer has a responsibility to provide a workplace free from recognized hazards that are causing or are likely to cause death or serious physical harm. You have a responsibility to comply with safety and health rules applicable to your own actions and conduct.

Safety information—Read all safety bulletins and handouts. Obey them! Look and listen to all safety instructions.

Tools—Use the proper tool for the job. Defective tools should be tagged and reported. Power tools should be checked for defective switches and cords. Return tools to their proper place when finished.

Clothing—Wear proper work clothes for safety. Loose sleeves, pant legs, and coats are dangerous around machinery. Rings and jewelry belong in public, not in the workplace.

Lifting—Size up the load. If it can't be handled easily, get help. When lifting, bend your knees, get a good grasp, keep your back straight, and lift by straightening your legs.

Personal protective equipment—Personal protective equipment is part of your uniform. Wear it always. It is available for one reason—to protect you from serious injury! Never be without it.

Machinery—Never repair or adjust machinery unless authorized. Never run machinery that is defective or has safety features disconnected. Observe all lockout/tagout procedures.

Reporting unsafe conditions—Be on the lookout for unsafe and hazardous conditions. Report them to your supervisor immediately.

Injuries and near misses—Injuries, no matter how minor, should be reported. Near misses mean something has gone wrong. By reporting near misses, changes can be made before serious accidents occur.

Housekeeping—A clean workplace is a safe workplace. Tools put in their proper places, liquids in proper containers, boxes and storage containers clearly marked, ensure safer acts. Cords, tools, rags, containers, equipment, all have their place. Learn them. Keep floors clean and dry.

Emergency action—Knowing where to go and when can save lives! Learn what to do during emergency situations. Know where emergency numbers are located and who to report to. Know where shelters are. Brush up on first-aid. Be prepared!

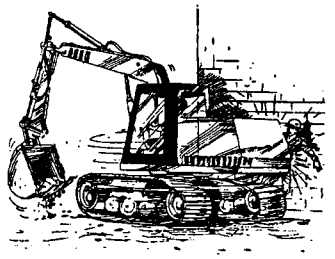
Fire safety—Obey "no smoking" rules. Dispose of smoking materials in proper receptacles. Use care in handling, transporting, and transferring flammable liquids. Place waste materials and rags in fire safety containers.

Safety training—Train yourself to think and work safely every day. Remember all safety rules and develop good safety attitudes. Be a leader, not a follower, in safety.

Safety begins with you and involves everyone at your worksite. Safety is comprehensive and covers many rules. These are just a few, a beginning. Make it your goal to be a safe employee.

Adapted from, "Welcome to Your New Job," a safety pamphlet from the Michigan Department of Labor.

OSHA's focused inspection program concentrates on "caught-in-between" hazards



Have you ever read one of the following headlines in your local newspaper? Or experienced such a tragedy at your worksite?

Trench cave-in claims the life of a local construction worker

Rotating crane superstructure crushes worker at Diggers construction site

Every day construction workers are injured or killed by what OSHA classifies as "caught-in-between" hazards. Eighteen percent of all construction related deaths are caused by these types of accidents. This is why OSHA is focusing in on worksite hazards that present the possibility of being caught-in-between something and severely injured or crushed to death.

This *Safety Selection* serves to remind you of just a few of the many OSHA regulations that are designed to protect you from "caught-in-between" injuries.

Trenching and shoring

- A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are four feet or more in depth so as to require no more than 25 feet of lateral travel for employees.
- Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with the OSHA rules.
- Shield systems must not be subjected to loads exceeding those which the system was designed to withstand.

Materials handling, storage, use, and disposal

- All materials stored in tiers shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling or collapse.

Cranes, derricks, hoists, elevators, and conveyors

- Accessible areas within the swing radius of the rear of the rotating superstructure of the crane, either permanently or temporarily mounted, shall be barricaded in such a manner as to prevent an employee from being struck or crushed by the crane.

Tools, hand and power

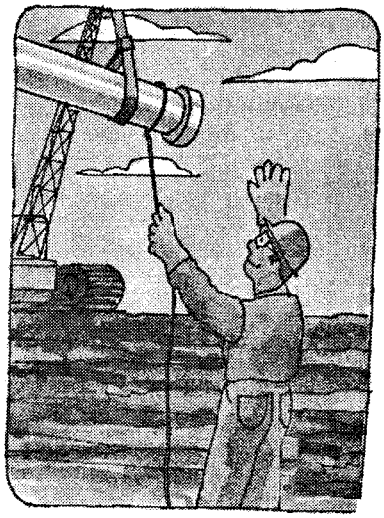
- When power operated tools are designed to accommodate guards, they shall be equipped with the guards when in use.
- Belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating or moving parts of equipment must be guarded if such parts are exposed to contact by employees or otherwise create a hazard.
- Machines designed for a fixed location shall be securely anchored to prevent walking or moving.

Mechanized equipment

- Bulldozer and scraper blades, end-loader buckets, dump bodies, and similar equipment, shall be either fully lowered or blocked when being repaired or when not in use. All controls shall be in a neutral position, with the motors stopped and brakes set, unless work being performed requires otherwise.

As part of the Focused Inspection Initiative, this is only one of the four areas that OSHA is putting most of their efforts into when they inspect jobsites. The four areas: struck-by, fall protection, caught-in-between, and electrical hazards, cause 90% of all fatalities at construction worksites.

OSHA's focused inspections concentrate on "struck by" hazards



Have you ever been struck by something at your construction site? Every day many workers are struck by vehicles, materials, debris, and tools at construction sites. Twenty-two percent of all construction injuries and deaths are caused by being hit by an object. This is why OSHA is focusing in on work-site hazards that present the possibility of being hit.

This *Safety Selection* serves to remind you of just a few of the many OSHA regulations that are designed to protect you from "struck by" injuries.

Personal protective equipment

- Employees working in areas where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock and burns, shall be protected by protective helmets.

Scaffolding

- Where persons are required to work or pass under a scaffold, the scaffold must be provided with a screen between the toeboard and the guardrail.
- Overhead protection must be provided for workers on a scaffold exposed to overhead hazards.
- Materials being hoisted onto a scaffold must have a tag line.

Fall protection-protection from falling objects

- Toeboards, when used as falling object protection, shall be erected along the edge of the overhead walking/working surface for a distance sufficient to protect employees below.
- Materials and equipment shall not be stored within six feet of a roof edge unless guardrails are erected at the edge.
- Materials which are piled, grouped, or stacked near a roof edge shall be stable and self-supporting.
- Canopies, when used as falling object protection, shall be strong enough to prevent collapse and to prevent penetration by any objects which may fall onto the canopy.

Cranes, derricks, hoists, elevators, and conveyors

- Accessible areas within the swing radius of the rear of the rotating superstructure of the crane, either permanently or temporarily mounted, shall be barricaded in such a manner as to prevent an employee from being struck or crushed by the crane.
- All employees shall be kept clear of loads about to be lifted and of suspended loads.

Structural steel assembly

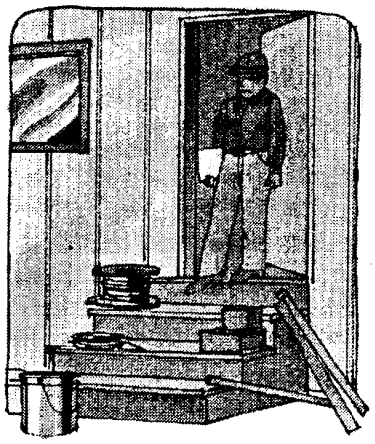
- Tag lines shall be used for controlling loads.

Excavations

- No employee shall be permitted underneath loads handled by lifting or digging equipment. Employees shall be required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials.
- Employees must be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations.

This is only one of the four areas that OSHA is concentrating on when inspecting jobsites as part of the Focused Inspection Initiative.

Beyond the regulations: Some commonsense fall protection helps



You will usually find this page filled with OSHA rules, hopefully laid out in a digestible form, but still they are OSHA rules and regulations. This *Safety Selection* takes a different slant and includes some practical tips that you will not find in the fall protection rules for protecting yourself and your fellow workers.

If you are required to work at heights of six-feet or more, your employer must take steps to protect you from falling. After a job site evaluation for fall hazards and steps to minimize the hazard have been taken, your employer will select and provide you with the most appropriate fall protection equipment for the situation. It is up to you to use this equipment properly and diligently to keep from falling.

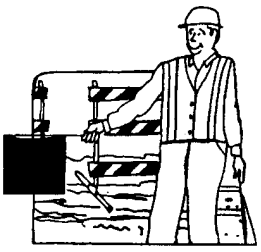
In addition, here are some other things you can do to stay safe while working at heights:

- Keep your mind on your work at all times. No horseplay on the job. Injury or termination, or both, can be the result.
- Watch where you're walking. Don't run.
- Avoid the use of illegal drugs or alcohol or being under the influence of same on the project. If your physician prescribes drugs that warn against driving or using machinery, let your supervisor know.
- Never distract the attention of fellow workers. To do so may cause injury.
- Keep walking and working surfaces clear of litter and debris.
- Keep walking and working surfaces as level as possible. Faulty patching, wear, sagging supports, warped boards, and poorly constructed working surfaces are conditions to look for to eliminate slips and falls.
- Keep working surfaces clear and dry. Grease, oil, water, dirt, and inclement weather leave surfaces potentially dangerous.
- Know what emergency procedures have been established for your jobsite.
- Never work aloft if you are afraid to do so, are subject to dizzy spells, or if you are apt to be nervous or sick.
- Wear fall protection equipment as prescribed for each job.
- Never enter an area which has been roped off or barricaded.
- Keep away from the edges of cuts, embankments, trenches, holes, and/or pits.
- Never throw anything "overboard." Someone passing below may be seriously injured.

If a slip or a fall condition does exist, take short steps with toes pointed out, walking on the whole portion of your foot when crossing rough or slippery surfaces. (The closer you come to putting your foot straight down, the less chance you have of slipping and falling.) Do not make sharp turns. If a fall does start to happen, protect your head and neck from injury by looking at the spot you are about to hit. Relax, go limp, and do not resist the fall. As you land—roll.

Tool Box Talks Safety Tips

Road construction—danger at its highest level!



We all get involved in road construction. For some, it's a matter of slowing down and showing patience in construction zones. For others, those that work road construction, just being at work is dangerous. And for flagpersons, it can be a life or death issue. Have you ever wondered what it is like being one of those brave souls, standing out in the open, waving a red flag, hoping motorists are attentive and ready to stop. Many times they don't, and another statistic is created.

OSHA's role in roadwork safety

OSHA realizes the dangers at roadway construction sites and has written some basic rules to protect workers. Whether you are operating a compactor, paver, crane, excavator, or are a signalperson, OSHA is concerned for your safety.

OSHA's rules for barricades, signals, and flagmen are found in 29 CFR 1926.200–203. Some of the definitions OSHA uses in these rules are:

- Barricades are obstructions to deter the passage of persons or vehicles.
- *Signs* warn of hazards. They are temporarily or permanently affixed or placed at locations where hazards exist.
- Signals are moving signs, provided by workers such as flagmen, or by devices such as flashing lights, to warn of possible or existing hazards.

Accident prevention signs

- Signs and symbols required by the OSHA rules must be visible at all times when work is being performed, and shall be removed or covered promptly when the hazard no longer exists.
- Danger signs shall be used only where an immediate hazard exists.
- Caution signs shall be used only to warn against potential hazards or to caution against unsafe practices.
- Construction areas shall be posted with legible traffic signs at points of the hazard. All traffic control signs or devices used to protect construction workers must conform to American National Standards Institute (ANSI) D6.1-1971, Manual on Uniform Traffic Control Devices for Streets and Highways.

Signaling

- When necessary protection is not provided by signs, signals, and barricades, flagmen or other appropriate traffic controls must be provided.
- Signaling directions used by flagmen shall conform to the Manual on Uniform Traffic Control Devices for Streets and Highways.
- Hand signaling by flagmen shall be by use of red flags at least 18-inches square or sign paddles, and after dark, red lights.
- Flagmen must be provided with and must wear a red or orange warning garment while flagging. Warning garments worn at night must be of reflectorized material.

Barricades

Barricades for protection of employees shall conform to the Manual on Uniform Traffic Control Devices for Streets and Highways.

The rules presented here are just a few of the basic OSHA requirements. Because of the dangers of road construction many states are beefing up protection for workers and are serious about enforcement. This is one area all of us, workers and motorists, can be involved in worker safety.

Laser technology is great for construction but can be dangerous to your health

Lasers have been helping the construction industry for many years now, especially in the area of leveling and alignment applications. New technologies are being developed all the time with many coming in the area of controlling the blades on bull dozers and road graders for precision cutting and grading. However, lasers on jobsites must be operated by workers trained in the use of the laser equipment.

OSHA's Nonionizing Radiation standard, 29 CFR 1926.54, provides general requirements for laser use and the required training and certification.

General requirements and safety precautions

- Areas in which lasers are used must be posted with standard laser warning placards.
- Laser units in operation should be set up above the heads of employees when possible.
- Beam shutters or caps shall be utilized, or the laser turned off, when laser transmission is not actually required.
- When the laser is left unattended for a substantial period of time, such as during lunch hour, overnight, or at change of shifts, the laser shall be turned off.
- Only mechanical or electronic means shall be used as a detector for guiding the internal alignment of the laser.
- Laser equipment must bear a label to indicate maximum output.
- The laser beam must not be directed at workers.
- When it is raining or snowing, or when there is dust or fog in the air, the operation of laser systems shall be prohibited where practicable. In any event, workers must be kept out of range of the area of source and target during such weather conditions.
- When anyone is working in an area where a potential exposure to direct or reflected laser light greater than five milliwatts exists they must be provided with antilaser eye protection as specified in §1926.102(b)(2).

- Workers shall not be exposed to light intensities above:
  - One micro-watt per square centimeter for direct staring. Direct staring applies when you are required to or are likely to look directly into the beam, towards the source, in order to perform required work.
  - One milliwatt per square centimeter for incidential observing. Incidental observing applies to exposure where looking directly into the laser is not required and is unlikely to occur in the performance of your work.
  - Two and one half watts per square centimeter for diffused reflected light.
  - Ten milliwatts per square centimeter for microwave power densities.

Training requirements

Before you can install, adjust, and operate laser equipment you must be trained in the use of the equipment and be:

- Trained in applicable manufacturer's recommendations.
- Instructed in the various hazards associated with the use of the equipment and the necessary or recommended control measures for the elimination of the hazards.

The training should be conducted by a qualified representative of the manufacturer, or by a knowledgeable individual designated by your employer.

Certification

- When you are operating laser equipment you must have proof of qualification with you at all times.

AVOIDING ELECTROCUTIONS DURING SCAFFOLD WORK

Electrocution can occur when setting up, moving, or working from metal or conductive scaffolds near overhead power lines. When scaffolds, conductive metal tools, or other materials contact overhead power lines, workers can receive serious and often fatal injuries. To avoid becoming one of the statistics, follow these rules.

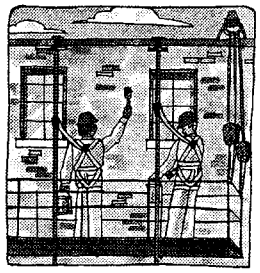
When Setting Up Or Moving Scaffolds

- Conduct an initial survey of the worksite before beginning . Things to look for include:
  - Distance of the scaffold from overhead power lines;
  - Distance between the ground and any sagging power lines;
  - Scaffold height and weight;
  - Wheel condition of the scaffold;
  - Obstacles;
  - Ground slope or changes in elevation that may alter clearance distance;
  - Other ground or floor conditions.
- Read and obey all posted warning signs where electrical hazards exist.
- Listen carefully and follow all training you receive on the dangers of electrical hazards.
- Lock scaffold sections or tiers together vertically with pins or something else to secure them to prevent separation of the sections and unexpected or unplanned movement of the scaffold.
- Never set up a scaffold within the following minimum clearance distances from exposed, energized power lines:
  - 2 feet for insulated power lines of less than 300 volts; or
  - 10 feet for insulated power lines of 300 volts or more and for all uninsulated power lines.
- Remember: Most overhead, high-voltage power lines are not insulated and you should assume that such lines are not insulated if there is any doubt.
- Notify the utility company when scaffolds must be erected or moved in areas with overhead power lines where the above distances cannot be maintained. In such situations, utility companies should de-energize the power lines or cover them with insulating hoses or blankets before any work is initiated.
- Monitor the distance between the power lines and scaffold. If a scaffold is to be moved in the vicinity of overhead power lines, a competent worker should be assigned to observe the clearance and warn others if the minimum distance is not maintained.
- Follow established procedures in emergencies.
- Make sure there is at least one employee at the site who is trained in cardiopulmonary resuscitation (CPR).
- Use scaffolds made of nonconductive material whenever available.

When Working On Scaffolds

- Do not use electrically conductive tools or materials where they may contact overhead power lines. Nonconductive tools or materials should be substituted whenever possible.
- Be careful to avoid power lines when moving materials up to or around scaffold platforms.

Safety tips from the new scaffold rule



When a new or revised rule comes from OSHA there usually are some new ways of doing things. This new scaffold rule, with some new ways of doing things, is designed to protect you from scaffold-related hazards such as falls, falling objects, structural instability, electrocution, and overloading. It also regulates the design, construction, and use of scaffolds.

Your supervisor and coworkers can do everything right in setting up a scaffold according to the safety rules, but if you don't use it properly your scaffold can be a death trap. Here are some safety tips from the new rule for you to think about and apply.

Scaffold access

- Crossbraces must not be used for access.
- Portable, hook-on, and attachable ladders must be positioned so as not to tip the scaffold.
- When hook-on and attachable ladders are used on a supported scaffold more than 35 feet high, they must have rest platforms every 35-feet.

Scaffold use

- Scaffolds and scaffold components must not be loaded more than their maximum intended loads or rated capacities, whichever is less.
- The use of shore or lean-to scaffolds is prohibited.
- Scaffolds and components must be inspected for visible defects by your competent person before each work shift, and after any occurrence which could affect a scaffold's structural integrity.
- Scaffolds must not be moved with workers on them, unless they have been designed specifically for such movement.
- Scaffolds must be erected, moved, dismantled, or altered only under the supervision and direction of your qualified competent person.
- You are prohibited from working on scaffolds covered with snow, ice, or other slippery material except to remove the slippery material.
- Work from scaffolds is prohibited during storms or high winds unless your competent person has determined it is safe and you are protected by a personal fall arrest system or wind screen.
- Debris must not be allowed to accumulate on platforms.
- Makeshift devices, such as, but not limited to boxes and barrels, shall not be used to increase your working level height.

Fall protection

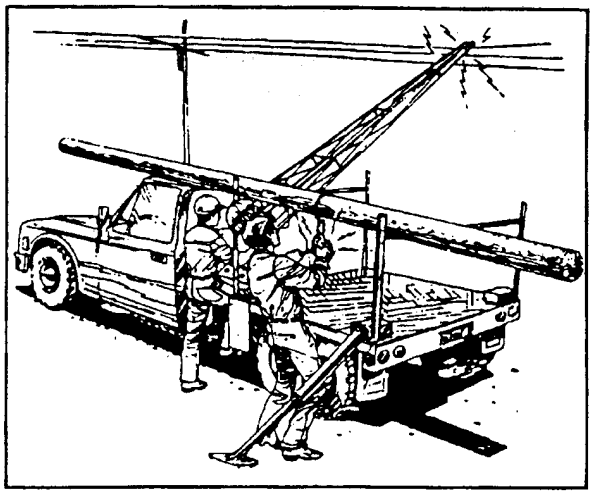
- When you are on a scaffold more than ten feet above a lower level you must be protected from falling to that lower level by the provisions in the new rule for each type of scaffold used. You would use either a personal fall arrest or guardrail system.

Falling object protection

- In addition to wearing hardhats you must be provided with additional protection from falling hand tools, debris, and other small objects through the installation of toeboards, screens, or guardrail systems, or through the erection of debris nets, catch platforms, or canopy structures that contain or deflect the falling objects.

These are just a few of the rules to insure scaffold safety. Some are old, some are new, but all are there to help you work safe. Ask your supervisors if they have read the new rule and have done everything possible to make your day a safe one, and then ask yourself if you are doing everything possible to help make your day and your work safe. The new scaffold rule is effective November 29, 1996.

Contact with overhead power lines killed 150 workers in 1995



According to 1995 fatality figures, 150 American workers died when they contacted overhead power lines. For every 41 work related deaths in 1995, one was from high voltage electrocution. This a sobering statistic. If you stop to think about it, all it would take to drop this to zero is constant vigilance.

Accident Type: Electrocution
Employee Job Title: Laborer
Experience at This Type Work: 3 months
Description of Accident: Five employees were constructing a chain link fence in front of a house and directly below a 7200-volt energized power line. One employee picked up a 21-foot section of top rail and held it up vertically. The top rail contacted the 7200-volt line, and the employee was electrocuted.

Accident Type: Electrocution
Employee Job Title: Material Hauler
Experience at This Type Work: 5 years
Description of Accident: Employee was unloading a 40-foot wood telephone pole from a pipe rack mounted on a truck crane. The truck operator raised the 17-foot boom to provide sufficient distance for the employee to place a cable sling around the pole. However, in raising the boom, the operator made contact with overhead power lines. The victim reached for the metal come-along and received a fatal shock.

As you can see from the above OSHA reports, electricity does not respect a person's experience. It only respects safe work practices.

Your company is responsible to instruct you to avoid unsafe conditions at your construction site. This includes training in recognizing the dangers of overhead power lines and other unsafe situations involving electricity.

You are responsible to ensure you and your fellow employees are constantly putting your training, and good common sense, into practice. Some of the "electrical" safety rules you should be constantly aware of are:

- Do not work near any part of an electrical power circuit which might be contacted in the course of your work.
- Guard all electrical power circuits against accidental contact by: (1) deenergizing and visually grounding the circuit, or (2) guarding it effectively by insulation or other means.
- No work should be done on electrical circuits unless an effective lockout/tagout program is implemented.
- Note the presence of power lines and be extremely cautious when working near them. Always put the following OSHA "distance" rule into practice: For lines rated over 50,000 volts, minimum clearance between the lines and any part of a crane or load must be 10-feet plus 4-inches for every 10,000 volts over the 50,000 volts.

Remember, all it takes to prevent an electrocution at your jobsite is: (1) treat electricity with respect, (2) follow proper safety rules, (3) constant vigilance, (4) constant vigilance, and (5) constant vigilance.

Handling the Heat

Under normal conditions, your body regulates its temperature perfectly. Heat stress occurs when abnormally hot air and/or high humidity, or extremely heavy exertion prevent your body from cooling itself fast enough. When this happens you may suffer a heat stroke, heat exhaustion, or heat cramps.

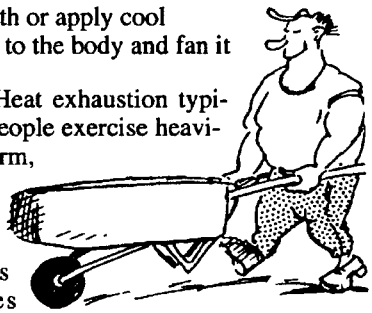
Heat Stroke - Heat stroke is life-threatening. The body's temperature-control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly.

Symptoms of Heat Stroke

- hot, dry, red or spotted skin
- extremely high body temperature
- very small pupils
- mental confusion
- convulsions
- loss of consciousness

First Aid for Heat Stroke

- get medical attention immediately
- have victim lie down to prevent shock
- remove person from heat - give nothing by mouth
- cool victim - immerse him or her in a cool bath or apply cool compresses to the body and fan it



Heat Exhaustion - Heat exhaustion typically occurs when people exercise heavily or work in a warm, humid place where body fluids are lost through heavy sweating. When it's humid, sweat does not evaporate fast enough to cool the body properly.

Symptoms of Heat Exhaustion

- cool, pale, and moist skin
- heavy sweating
- headache, nausea, vomiting
- dilated pupils
- dizziness, disorientation
- slight elevation in body temperature

First Aid for Heat Exhaustion

- remove victim from heat
- apply cool wet cloths
- fan victim, stop if victim develops goose bumps or shivers
- have victim lie down to prevent shock
- give victim one-half glassful of water to drink every 15 minutes, if he or she is fully conscious and can tolerate it
- get medical attention

Heat Cramps - Heat cramps are muscular pains and spasms due to heavy exertion. Any muscles can be affected, but most often it's the muscles you've been using. Loss of water and salt from heavy sweating cause these cramps.

Symptoms of Heat Cramps

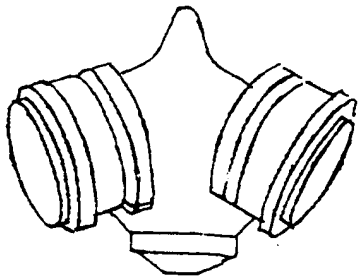
- painful muscle spasms
- sweaty skin
- normal body temperature

First Aid for Heat Cramps

- sit or lie down in a cool area
- drink one half glassful of water every 15 minutes
- gently stretch and massage cramped muscles

Any form of heat stress can be a serious health problem. In most instances it can be prevented through proper diet, proper clothing and common sense. In the summertime, always drink plenty of liquids, preferably water, and take periodic breaks by getting out of the heat. Should a heat emergency arise, get help immediately. Any delay could be life-threatening.

Protecting Yourself From Lead Exposure



The Occupational Safety and Health Administration (OSHA) has identified the following tasks as having a high risk of lead exposure and requiring specific protective measurements.

The first set of tasks requires the use of halfmask air purifying respirators with a protection factor of 10. These tasks include:

- Manual scraping and sanding.
- Manual demolition of structures.
- Heat gun application.
- Power tool cleaning with dust collection systems.
- Spray painting.
- General cleanup of areas where such tasks are performed.

The second set of tasks require powered air purifying respirators (PAPRs) are required to be used. These tasks include:

- Using lead containing mortar.
- Lead burning.
- Rivet busting.
- Power tool cleaning without dust collection systems.
- Cleanup activities where dry expendable abrasives are used.
- Abrasive blasting enclosure movement and removal.

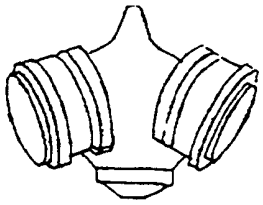
The third category covers tasks for which the use of supplied air respirators is recommended. This category includes:

- Abrasive blasting.
- Welding, cutting, and torch burning on steel structures.

Steps To Take At Work And At Home To Protect Yourself And Your Family

- Be aware of the health effects of lead exposure and discuss with your doctor any symptoms or concerns that may be related to lead poisoning.
- Participate in any blood lead or air monitoring program offered by your employer.
- Use engineering controls such as source containment and local exhaust ventilation to minimize exposures to lead.
- Be aware that the highest lead concentrations may occur inside containment structures.
- Use respirators whenever required, recommended, or when you suspect there may be the potential for exposure. Follow the guidelines given above for which respirator to wear during specific tasks.
- Change into disposable or washable coveralls at the worksite.
- Do not eat, drink, or use tobacco products in the work area.
- Wash your hands and face before eating, drinking, or smoking outside the work area.
- Shower and change into clean clothing before leaving the worksite to prevent contaminating homes and automobiles.
- Check your hands before taking scheduled and unscheduled breaks. Be sure to check under the fingernails.
- Check the straps and other parts of respirators, to avoid contamination from that source.

RECOGNIZING RESPIRATORY HAZARDS



If you don't know your dusts from your mists or your fumes from your vapors, you're not the only one. Yet knowing what these common breathing hazards are can be the first step you take in guarding against them. Respiratory contaminants can be divided into two basic groups: particles and gases. How you protect yourself against a specific hazard will depend upon which type it is and how much you are exposed to.

Particles

A particle is simply a very tiny piece of matter. If the particle is dry it is called "dust." You've seen these plenty of times, when sawing wood or tearing down old plaster. If it is a liquid particle, it is a "mist." You may have seen these while spray painting.

If the particle is created by burning a material like metal, it is called a "fume." These are often generated by welding.

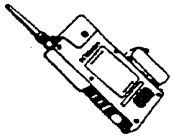
Some particles can be seen by the naked eye; others cannot. In either case, breathing in particles can clog and irritate your respiratory system.

Gases

Gases have no identifiable shape or form. They can't be seen and you may not even be able to smell them. Gases simply "hang" in the air around us. Some liquids, when heated, become gases called "vapors." (When you boil water, for example, the water evaporates — it turns into water vapor.) Gases cannot be seen by the naked eye, but many can be dangerous when breathed — they can damage your respiratory system, and other organs.

A frequent gaseous hazard at construction sites that is often overlooked is carbon monoxide (CO) from nearby motor vehicle traffic or from such procedures as dynamiting trenches. Because CO is heavier than air it sinks and can easily remain in trenches even after ground level may test clear of it. Monitoring of the bottom and middle levels of the trench should be done to be certain of preventing carbon monoxide poisoning.

Monitoring



Portable monitoring devices like the one pictured here are available and should be used whenever there is cause for concern about appropriate levels of oxygen or inappropriate levels of contaminants in the air.

Personal Protection

If you are exposed to any of these common respiratory hazards, at work or at home, be sure to use the appropriate respirator to protect against the hazards you face. At the worksite, your supervisor can identify the respiratory hazards in your area. Your supervisor can also advise you about the type of personal protective equipment to use, such as dust masks or respirators. For off the job activities, consider the type of task you'll be doing — for home sanding or sawing, a disposable dust mask may be enough to filter out potentially dangerous particles. If you'll be working with chemicals, gases, or paint, a cartridge-type respirator may be needed. If in doubt, ask your safety representative at work — he or she will probably be happy to advise you about off the job safety.

And remember, while using the right respirator is important, your tasks may require additional personal protective equipment such as eye, hand, or hearing protection.

Tool Box Talks Safety Tips

WORKING SAFELY WITH POWER TOOLS

Power tools enable us to be more efficient, productive workers, but also can cause injuries if used carelessly or incorrectly. Safety should be foremost in your mind when working with electrical equipment. When it comes to inflicting injuries, power tools pack a double whammy. A worker faces hazards from the tools themselves and the electricity that powers them.

Electrical Injuries

Electricity will give you a shock if you accidentally become a ground. Breathing can stop and nerve centers may be temporarily paralyzed. Your heart beat is interrupted so blood stops circulating. Heat from the current can cause internal bleeding and destruction of nerves or muscles. The severity of injury depends on where current flows and how long, not the voltage. For example, did you know that 60/1000 of an ampere may kill you if it passes through the chest?

Mechanical Injuries

Mechanical injuries from power tools and electrical equipment include cuts, punctures, crush injuries, amputations and injuries from debris.

Some General Safety Rules

General safety rules apply to both stationary and portable power tools. The following rules apply to every power tool you use:

- Keep your work area as clean as possible. Sawdust, paper, and other debris are a fire hazard and can damage your tools.
- Work in an area when it is well lit and dry, if at all possible.
- Maintain your tools. For best and safest performance, keep them sharp, oiled and stored in a safe, dry place. Regularly inspect tools, cords and accessories. Repair or replace problem equipment immediately.
- Use safety features like three-prong plugs, double-insulated tools, and safety switches. Make sure machine guards are in place on large and small equipment.
- Use protective equipment when necessary. This might include safety glasses, hearing protection and respiratory protection.
- Dress right. Never wear clothing or jewelry that could become entangled in power tools.
- Install or repair equipment only if you're qualified. A faulty job may cause fires or seriously injure you or other workers.
- Use the right tool for the job. Don't force a small tool to do heavy-duty work.
- Keep electric cables and cords clean, free from kinks. Never carry a tool by its cord.
- Grounding is one of the most important safety measures to take to provide a safe path for electricity, preventing leakage of current in circuits and equipment. Grounding should be provided for the entire system and individual pieces of equipment. Check all ground connections regularly for tightness.

Good tool habits soon become second nature. Treat electricity with the respect it deserves and it will serve you efficiently and safely.

Tool Box Talks Safety Tips

Hand-tool safety: What do the regs say?

Subpart I of the Safety and Health Regulations for Construction talks about hand and power tools. The below checklist should help you in ensuring hand and hand held power tools at your construction site are in a safe condition and ready for the OSHA inspector to take a look around.

General Requirements

❑ All hand and power tools and similar equipment, whether furnished by the employer or the employee, will be maintained in a safe condition.

❑ When power operated tools are designed to have guards, they will be equipped with the guards when in use.

❑ Employees using hand and power tools will be provided with the personal protective equipment necessary to protect them from the hazards produced.

Hand Tools

❑ Wrenches, including adjustable, pipe, end, and socket wrenches will not be used when jaws are sprung to the point that slippage occurs.

❑ Impact tools, such as drift pins, wedges, and chisels, will be kept free of mushroomed heads.

❑ The wooden handles of tools will be kept free of splinters or cracks and shall be kept tight in the tool.

Power-operated hand tools

❑ Electric power operated tools will either be of the approved double-insulated type, be properly grounded, or used with ground fault circuit interrupters.

❑ The use of electric cords for hoisting or lowering tools will not be permitted.

❑ Pneumatic power tools will be secured to the hose in a positive manner to prevent accidental disconnection.

❑ The manufacturer's safe operating pressure for all fittings will not be exceeded.

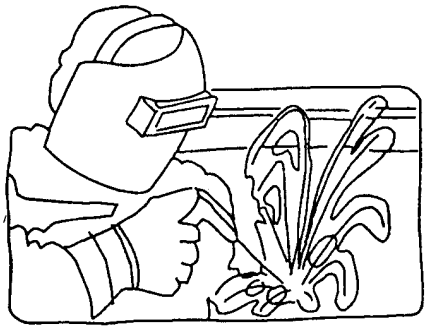
❑ All fuel powered tools will be stopped while being refueled, serviced, or maintained, and fuel will be transported, handled, and stored in accordance with Subpart F of the construction regulations.

❑ Only employees who have been trained to use powder-actuated tools will be allowed to operate them.

Note: This Safety Selection is a partial listing of the requirements of 29 CFR Subpart I—Tools Hand and Power. For a complete set of tool requirements consult 29 CFR Subpart I.

Tool Box Talks Safety Tips

Test your knowledge of OSHA's welding and cutting regulations found in 29 CFR 1926 Subpart J.



Gas Welding and Cutting §1926.350

1. You must be thoroughly instructed in the safe use of fuel gas.....T F
2. When cylinders are transported by powered vehicles, they shall be secured in a horizontal position.....T F
3. Cylinders containing oxygen or acetylene or other fuel gas shall not be taken into confined spaces.....T F
4. Oxygen and fuel gas hoses can be interchangeable and a single hose having more than one gas passage can be used.....T F
5. Torches in use shall be inspected at the beginning of each working shift for leaking shutoff valves, hose couplings, and tip connections. Defective torches shall not be used.....T F
6. Torches shall be lighted by friction lighters or other approved devices such as matches or from hot work.....T F

Arc Welding and Cutting §1926.351

7. Any current-carrying parts passing through the portion of the holder which the arc welder or cutter grips, and the outer surfaces of the jaws of the holder, must be fully insulated against the maximum voltage encountered to ground.....T F
8. The frame of your arc welding and cutting machine must be grounded.....T F
9. Employers shall instruct employees in the safe means of arc welding and cutting.....T F
10. When electrode holders are to be left unattended, the electrodes can be removed and the holders can be so placed or protected that they cannot make electrical contact with employees or conducting objects.....T F
11. Any faulty or defective equipment must be reported to your supervisor.....T F

Fire Prevention §1926.352

12. When practical, objects to be welded, cut, or heated shall be moved to a designated safe location or, all movable fire hazards must be taken to a safe place or otherwise protected. ..T F
13. No welding, cutting, or heating shall be done where the application of flammable paints, or the presence of other flammable compounds, or heavy dust concentrations create a hazard. ...T F
14. At job sites, suitable fire extinguishing equipment need not be available in the work area.....T F
15. Drums, containers, or hollow structures which have contained toxic or flammable substances shall, before welding, either be filled with water or thoroughly cleaned of such substances, ventilated, and tested.....T F

Answers: (1) True; (2) False (vertical position); (3) True; (4) False (shall not be inter-changeable) and (shall not be used); (5) True; (6) False (and not by matches or from hot work); (7) True; (8) True; (9) True; (10) False (must be removed) and (must be so placed or protected); (11) True; (12) True; (13) True; (14) False (must be immediately available); (15) True; (16) True

Safe Practices with Mechanical Lifting Devices

Unnecessary deaths have occurred from the improper use of mechanical lifting devices such as personnel platforms being lifted by cranes. Such accidents could easily be repeated at many jobsites in the construction industry. The Occupational Safety and Health Administration (OSHA) is specific on the use of these platforms in construction.

Following are some recommended tips to avoid injuries when using personnel platforms:

- Always wear appropriate fall protection for the height and conditions in which you will be working. This is especially important when in a mechanical lifting situation, because the personnel platform moves as you are on or in it, causing conditions over which you have no control.

- Only use crane-suspended personnel platforms when other methods of worksite access are not possible or are more hazardous. Do not use it simply because it seems the quickest way.

- Only use the personnel platform for yourself and other required workers for a task, along with the tools and materials necessary to do the job. Do not use the personnel platform simply as a material hoist.

- Make sure a trial lift has been performed prior to you yourself getting on the platform. The trial lift must be repeated whenever the crane is moved. (A trial lift is when the platform is loaded to at least the anticipated load and is then lifted from the point of employee access to each workplace destination of the platform).

- After the trial lift and before you enter the platform, it must be lifted a few inches and inspected by a competent person. Also, the competent person must visually inspect the crane, all rigging, and crane or derrick support foundation.

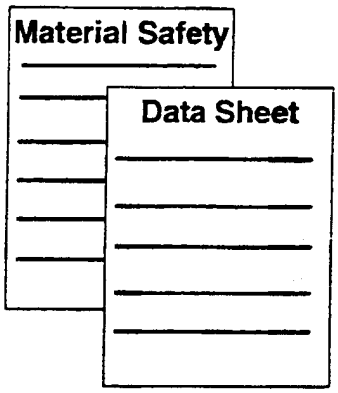
- Use tag lines unless their use creates an unsafe condition.

- You must remain in continuous sight of and in direct communication with the operator or signal person. If conditions dictate, radio communication must be used.

- You must take part in a pre-lift meeting between all personnel associated with the lift. This should include the operator, the signal person (if required), and all employees to be lifted.

- Never use platforms or systems rigged together on the spur of the moment by unqualified personnel. Any personnel platform or suspension system used must have been designed by a qualified engineer or person competent in structural design.

UNDERSTANDING YOUR COMPANY'S RIGHT TO KNOW PROGRAM



Most construction workers have to work with chemicals at one time or another. The goal of your company's Right to Know Program (sometimes called a Hazard Communication Program) is to inform you about the chemicals you might have to work with, so you can use them safely. There are several important aspects of a Right to Know Program, including:

1) Your company's written program;

2) Labels and other forms of warning;

3) Material Safety Data Sheets (MSDSs); and

4) Employee training.

Get as much information as you can from these elements of your company's Right to Know Program. In addition, use the following guidelines to help protect yourself when working with chemicals:

- Read container labels and Material Safety Data Sheets (MSDSs). They will list safe handling procedures, such as "Wait for corrosive (or solvent) to dry completely before welding or cutting metal."
- Always add acids to water (not the other way around) to prevent boiling over and splashing.
- Never sniff a chemical to identify its type or location.
- Use appropriate personal protective equipment (PPE) when working with chemicals. These may include chemical splash goggles, full-face respirators, safety gloves, barrier creams, splash aprons, corrosive-resistant boots or any combination of the above.
- Make sure that PPE fits properly and that you know how to use it.
- When using respirators, match your canister or cartridge to the correct respirator and the particular chemical and replace when necessary.
- Don't wear contact lenses; these can absorb chemicals or trap them against your eyes.
- Know the location of eyewash stations and safety showers and how to use them. (In most cases, if you are exposed to a chemical splash, they will be your first emergency treatment.)
- Slowly mix corrosives or solvents, or dip parts into them.
- Never put your hands into corrosives or solvents—even if you are wearing gloves.
- Always wash your hands well before eating or smoking, and before and after every shift.
- Use engineering controls, including fans, exhaust hoods, and other ventilation systems installed for your protection.
- Know emergency first aid procedures.

If you are unclear about your company's safety procedures for handling chemical substances, speak to your supervisor. Make sure you understand everything you need to know about protecting yourself from chemical hazards. Use your company's Right to Know Program and stay safe.

Hazard communication—worker right to know

The Hazard Communication Standard requires your employer to inform you of the hazards of the chemicals at your worksite. The rule is designed for your protection. Knowing about its provisions and applying them in your daily work goes a long way in a cooperative effort between you and your boss.

Elements of the hazard communication standard

The items required by the hazard communication standard include:

- A hazard assessment—identifying the specific chemicals you work with.
- A written program—your company is required to have a written hazard communication program.
- Labels and labeling—these items are used to warn, caution and inform you about any dangers or potential risks.
- Material safety data sheets—provides thorough, accurate information on each hazardous chemical in your work area.
- Employee training—training is required at the time of your initial employment or assignment as well as whenever a new hazard is introduced into your workplace.

Find out about specific elements to your company's hazard communication program by reading the written program, locating the material safety data sheets, and learning how to read hazard labels.

More about workplace chemicals

Hazard definition

A toxic or hazardous substance regulated under this standard is any substance which has the ability to cause personal injury or illness. The rules are concerned with two main hazard types: health hazards and physical hazards.

- A *health hazard* is a chemical for which there is evidence that acute or chronic health effects may occur upon exposure. Types of health hazards include:

  Carcinogens: (cancer–causers) like formaldehyde or benzene
  Toxic agents: lawn and garden insecticides and arsenic compounds
  Reproductive toxins: thalidomide or nitrous oxide
  Irritants: bleaches or ammonia
  Corrosives: battery acid or caustic sodas
  Sensitizers: creosote or epoxy resins
  Organ–specific agents: sulfuric acid (affects skin), or asbestos (affects lungs)

- A *physical hazard* is a chemical for which there is valid evidence that it is a:

  flammable liquid or solid
  combustible liquid
  compressed gas
  organic peroxide
  oxidizer
  pyrophoric material
  unstable material or water–reactive material

Learning about chemical hazards at your worksite is important. It is the first step to preventing exposure to and possible occupational illness from workplace chemicals.

Tool Box Talks Safety Tips

***Safety Selections* For The Construction Industry**

The Safety Selections series can be used to conduct periodic safety meetings at the construction site. The material may be used by the foreman or other instructor as the basis for the safety discussion and the text of Safety Selections can be copied and distributed to workers as a handy reminder.

Exposure to lead—protecting yourself from the hazards

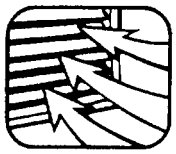
Because of the rust-inhibiting properties of lead-based paints they are still used on bridges, railways, ships, lighthouses, and other steel structures.

Significant exposure can arise from removing paint from surfaces previously coated with lead-based paint: such as in bridge repair, residential renovation, remodeling, and demolition.

If you work in such trades as plumbing, welding, or painting your chances of exposure to lead are good. The problem is—if you are not properly protected—your chances are also good that you are exposing yourself to the possibility of lead poisoning.

Lead can be absorbed into the body by breathing, eating, drinking, or smoking. If your employer, your "competent person," and you practice the good safe work practices illustrated in this safety selection you can cut your exposure to acceptable limits.

- Your employer is required to provide the protective systems and equipment.
- The competent person in your company is required to inspect the systems for proper functioning and make sure you are using the systems and equipment provided.
- You are required to faithfully use the provided equipment and systems.



Use the exhaust ventilation system, where provided.

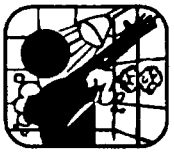
Use the correct, clean respirator

Keep the worksite clean. Use only a vacuum with a HEPA filter or wet cleaning methods when removing lead dust. Never use compressed air for cleaning.

Eat, drink, or smoke in areas outside the worksite. Keep all lunch boxes and coffee cups away from the work area. Use a seperate lunchroom.

Wash hands and face before eating, drinking, smoking, or applying cosmetics.

Use protective clothing. Store street clothes separately from work clothes. Never wear contaminated clothes home.



Shower and change into clean clothes, including shoes, before leaving the worksite so that no lead contamination is carried home.

Tool Box Talks Safety Tips

Coping With The Cold

It's winter again, the coldest time of year . Some construction projects will continue to go on even as the temperature drops. If you're working on one of those sites, you need to know how to stay warm.

When your body temperature drops even a few degrees below normal (which is about 98.6 degrees F), you can begin to shiver uncontrollably, become weak, drowsy, disoriented, unconscious, even fatally ill. This loss of body heat is known as "cold stress" or hypothermia.

Persons who work outdoors, such as construction workers, need to learn about how to protect against loss of body heat. The following guidelines can help you keep your body warm and avoid the dangerous consequences of hypothermia, frostbite, and overexposure to the cold.

Dress in Layers

Outdoors, indoors, in mild weather or in cold, it pays to dress in layers. Layering your clothes allows you to adjust what you're wearing to suit the temperature conditions. In cold weather, wear cotton, polypropylene, or lightweight wool next to the skin, and wool layers over your undergarments. In warm weather, stick to lose-fitting cotton clothing.

For outdoor activities, choose outergarments made of waterproof, wind resistant fabrics such as nylon. And, since a great deal of body heat is lost through the head, always wear a hat for added protection.

Keep Dry

Water chills your body far more rapidly than air or wind. Even in the heat of summer, falling into a 40 degree lake can be fatal in a matter of minutes. Always take along a dry set of clothing whenever you are working (or playing) outdoors. Wear waterproof boots in damp or snowy weather, and always pack raingear (even if the forecast calls for sunny skies).

Co-workers Should Check Up On Each Other

The effects of hypothermia can be gradual, and often go unnoticed until it's too late. If you know you'll be working outdoors for an extended period of time, take along a companion. (At the very least, let someone know where you'll be and what time you expect to return.) Ask your co-workers to check you for overexposure to the cold — do the same for your co-workers. Check for shivering, slurred speech, mental confusion, drowsiness, and weakness. If anyone shows any of the above signs, he or she should get indoors as soon as possible and warm up.

Warmth and Understanding

The key ingredients to preventing loss of body heat are dressing properly to stay warm, and understanding what you can do to protect against conditions that can cause frostbite, overexposure, or hypothermia.

Cold weather can be dangerous, but if you work in it properly you can be safe and productive.

Tool Box Talks Safety Tips

Basics Of Good Lifting Techniques

Most construction workers have to do some lifting of materials, tools, or equipment, and you're probably no exception. With the amount of mechanical lifting equipment available today, most heavy objects are lifted by fork lifts, hoists, dollies and other types of equipment.

However, sometimes it is necessary to load or unload by hand and you will be the one bearing the load. When that is the case, knowing the proper ways to lift can save you a great deal of pain and misery from a sprained back.

By using common sense, you can help keep your back out of trouble. Every time you think about lifting, think defensively about your back and the possibility of a back sprain Follow good lifting techniques, not only at work, but also at home. It's your back and your life. With proper exercise, a good diet and the proper lifting techniques, your chances of being out of work with chronic or severe back pain are greatly reduced.

Use the following basic guidelines when you need to lift by hand;

1. **Size up the load before trying to lift it.** Test the weight by lifting at one of the corners. If the load is too heavy or of an awkward shape, the best thing to do is get help from a fellow worker, or if possible use a mechanical lifting device. If you have to lift, make sure you can handle the weight.

2. **Bend the knees.** This is the single most important rule when lifting moderate to heavy objects. Take a tip from professional weight lifters. They can lift tremendous weights because they lift with their legs, not their backs. When lifting a crate or box, your feet should be placed close to the object. Center yourself over the load, then bend your knees and get a good hand hold. Lift straight up, smoothly. Allow your legs, not your back, to do the work.

3. **Do not twist or turn your body once you have made the lift.** Keep the load close to your body, and keep it steady. Any sudden twisting or turning could result in taking out your back.

4. **Make sure you can carry the load where you need to go before attempting to move it.** Also, make sure your path is clear of obstacles and that there are no hazards, such as spilled grease or uneven gravel in your path. Turn your body by changing foot positions, and make sure of your footing before setting out.

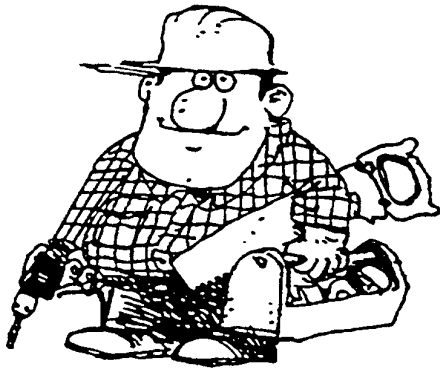
5. **Set the load down properly.** It's just as important setting it down as lifting it Lower the load slowly by bending your knees, letting your legs do most of the work. Don't let go of the load until it is secure on the ground.

6. **Always push, not pull, the object when possible.** When moving an object on rollers, for example, pushing puts less strain on the back and is safer, should the object tip.

Following these simple rules reduces your risk of injury to your back. If you have ever had back pain you know how important this is. If you have not suffered from back pain, following these rules will help assure that you never will.

Tool Box Talks Safety Tips

Hand Tool Safety



Portable Sanders - These tools make finishing work faster. Two types are orbital and belt. Remember these tips:

- Arrange cord so that it won't be damaged by the abrasive belt.
- Keep both hands on the tool for good control.
- Hold onto the sander when you plug it in.
- Clean dust and chips from the motor and vent holes regularly and lubricate when necessary.

Impact Wrenches - They operate on electricity or compressed air and deliver extra power and torque for fastening and loosening bolts and drilling. Don't force a wrench to take on a job bigger than it's designed to handle. Don't use standard hand sockets or driver parts with an impact tool as they can't take the sharp blows. Don't reverse direction of rotation while trigger is depressed.

Soldering Irons or "Guns" - They can be dangerous because of the head they generate. Handle with care - they can easily cause third degree burns. Always assume that a soldering iron is hot. Rest heated iron on a rack or metal surface. Never swing an iron to remove solder. Hold small soldering jobs with pliers, never hold in your hand. When cool, store it in its assigned area.

Propane and Gas Torches - These commonly used tools pose flame and heat hazard. Never use a flame to test for propane or gas leaks.

Never store the fuel tanks in an unventilated area and never use a tank with a leaking valve. Use torches in well-ventilated areas. Avoid breathing vapors and fumes they generate.

Glue Guns - A glue gun can be a real time saver. However, because they generate temperatures as high as 450°F, avoid contact with the hot nozzle and glue. If you get glue on your skin, immerse the area in cold water. Don't attempt to remove the glue. Cover with a cold compress.

Portable Drills - Variable speed drills are versatile tools used for boring holes, turning screws, buffing and grinding. Keep these pointers in mind when using them:

- Select the correct drill bit for the job to be done. Use only sharp bits.
- Make sure the material being drilled is secured or clamped firmly.
- Hold the drill firmly and at the correct angle. Don't force it to work or lean on it with all your strength.
- Always remove the bit from the drill when you're finished.
- Don't forget to wear safety glasses when you use the sharpener.

Wrenches - There are several important safety rules to follow when you use a wrench and needless to say, the selection of the right wrench for the job is one of them. Follow these guidelines:

- Consider the type of job that has to be done. The location and number of nuts and bolts will determine the type of wrench to use for the most efficient job.
- Never use a wrench as a hammer, hammering with a wrench is dangerous in itself and may also set up a hazardous condition for someone else later on through undetected damage to the tool.
- Never use a damaged wrench. Use only wrenches that are in top condition and if they become worn or defective, take them out of service immediately.

Follow the above guidelines for the specified tools and always use common sense with all hand tools. Use the proper tool for the proper job, and use it carefully.

Using Personal Protective Equipment Effectively

Personal protective equipment includes all clothing and accessories designed to create a barrier against workplace hazards. Your safety, health, and even your life can depend upon you wearing the necessary personal protective equipment (PPE) for the situation in which you are working. Some main categories of PPE are described below. Always make sure you are properly protected for whatever hazards you face.

Head Protection

On most construction sites hard hats are an essential part of everyday wear, and should be worn whenever you are within the boundaries of the construction zone or whenever there is the danger of debris or heavy objects falling down from above. Even though it should be second nature to you by now to wear your hard hat, this is a friendly reminder. Head injuries are one of the most life-threatening kind that can happen on a job site. Do what you can to protect your noggin.

Eye and Face Protection

You must wear suitable eye protection when your work presents the hazard of flying objects, glare, liquids, fumes, etc. Each eye, face, or face-and-eye protector is designed for a particular hazard; use one that's suitable for whatever hazard you will face when performing a particular task. Many construction site tasks might call for some type of eye protection, including such jobs as welding, cutting and sawing, spraying, etc.

Foot Protection

Like a hard hat, safety shoes or boots are probably standard required gear on your job site. If not, you still need to wear them for these situations: for protection of feet and legs from falling or rolling objects, sharp objects, molten metal, hot surfaces, and wet slippery surfaces. Safety footwear is classified according to its ability to meet minimum requirements for both compression (pressure) and impact tests. Make sure you have the footwear that will protect you from the hazards your feet will encounter on the job.

Hand Protection

Injuries that can happen to exposed or unprotected hands include burns, cuts, electrical shock, amputation, and absorption of chemicals. There is a wide selection of protective gloves, hand pads, sleeves, and wristlets to choose from to protect you adequately from hand hazards. Many job site activities call for hand protection, because construction work often requires handling of rough materials or inherently hazardous activities like welding with a flame or cutting with sharp objects. Use appropriate hand protection for the job you are performing.

Other

Other types of PPE that you might need for certain jobs on your jobsite include respiratory protection (see the August 1993 *Construction Regulatory Update* Safety Selections) and hearing protection. Check with your supervisor if you are uncertain about a particular job and the PPE you need to wear to perform that job.

Obeying the unenforceable—your attitude toward safety in general and personal protective equipment in particular

Your attitude towards safety in general

It has been said: "The measure of a civilization is the extent of its obedience to the unenforceable."

If we apply this thought to accident prevention, we might well say: "The degree of success in preventing accidents reflects the degree in which individuals obey the unenforceable."

Today is a good time for you to analyze your own attitude toward the so-called unenforceable as applied to safety. If an individual self analysis reveals an unsatisfactory frame of mind toward accident prevention, it must be corrected before our faults affect the attitudes of our family and coworkers.

We all know that attitudes are seldom fixed. They change, often rapidly, depending on new knowledge and experience. Take your attitude toward a new worker. The first day you may think that person a pompous jerk. After several weeks, you discover that same person to be one of the most interesting persons you know.

Attitudes toward safety can be just as varied and quickly reversed—from the attitude that it is a crackpot obsession pushed on us from the boss, to the attitude that safety makes sense and is well worth achieving. Just don't let this quick reversal of attitude be after a tragedy has occurred.

Don't belittle safety. It's the person who has been hurt that knows this best. Take it seriously, and encourage the same point of view in others.

Safety starts with people—you and me alike. We can make all the rules we like, but obedience to what is called the "unenforceable" is our real problem.

Your attitude toward personal protective equipment

Take personal protective equipment for example. What if a player on your favorite professional football team only put on his helmet when the coach was looking? Or what if he took off his shoulder pads because they were uncomfortable? Is this your attitude toward your hard hat and your safety glasses?

Football is a rough game, and if a player wants to be with the family after the game instead of in a hospital, protective equipment must be worn. Construction is a rough occupation! Going home uninjured at the end of the day depends on your attitude towards safety and loyalty to obeying the unenforceable.

Your personal protective equipment can't prevent some accidents from happening. It can't prevent a drill from breaking, or stop a coworker from dropping a toolbox on your foot, but it can prevent a serious injury.

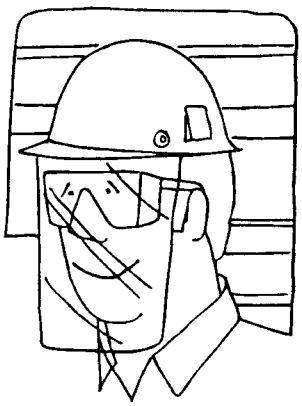
Such things as safety glasses, hardhats, hearing protectors, and safety shoes may be a nuisance to put on and may seem bulky and uncomfortable at first. In fact, it's tempting not to put them on at all, unless the safety boss is looking.

Complaints are as varied as the kinds of equipment you may need. You often hear that it's too heavy, or it gives me a headache, or they hurt my eyes. Often these are real complaints. A poorly fitted piece of protective equipment can cause headache or pain, and if it does, you should have it adjusted or refitted. Most of the time it's just a matter of getting used to wearing it.

Personal protective equipment has its place in sports, construction, manufacturing, and many other occupations. It is up to you to be professional and to recognize the role of protective equipment and take advantage of the benefits.

This *Safety Selection* is the lead off article for a series of *Safety Selections* on personal protective equipment. Look for upcoming *Safety Selections* on foot, respiratory, head, hearing, and eye and face protection.

Personal protective equipment—an overview of OSHA requirements



Do your supervisors nag you about not wearing your hard hat or wearing it backwards? They shouldn't have to, but they are just doing their job. However, there is a lot more to personal protective equipment (PPE) than the hard hat wars. If your company's PPE program is set up correctly, and running smoothly, a lot of time and effort was invested to give you the necessary tools to protect yourself from harm.

If your program is on target, your boss has:

- Evaluated the hazards at your worksite, and provided you with proper PPE for those hazards.
- Trained you to know what type of PPE is necessary, when it is necessary, how it is to be worn, and what its limitations are.
- Trained you to properly care for, and know when your PPE's useful life is over.

Your company's PPE program takes commitment from everyone to make it work. Let's look at some of the basic requirements for PPE from OSHA's point of view.

Your employer is responsible for requiring the wearing of appropriate PPE in all operations where there is an exposure to hazardous conditions or where the OSHA rules say it must be worn to reduce the hazards you face. In other words, OSHA specifies some situations where PPE must be worn, but can take action on any situation where it should be worn. For example, the OSHA rules talk about harmful plants and animals at a worksite, but say nothing about sunburn. However, the rules are written in such a way that your company (and you), must consider all known and recognized hazards. Severe sunburn is a known and recognized hazard.

Everyday you face known and recognizable hazards capable of causing injury. These hazards can be from the work you are doing, or your physical surroundings. They can be chemicals, radiological hazards such as the sun or lasers, or mechanical equipment. The rules state that PPE must be provided, used, and maintained in a sanitary and reliable condition whenever you face such hazards.

Notice that everyone has responsibility for PPE.

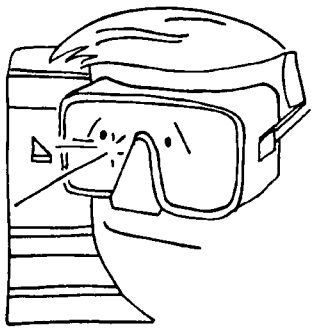
Your employer must PROVIDE you certain personal protective equipment. If your PPE is personal and you provide it yourself, your employer is still responsible to assure it is adequate protection, properly maintained, and sanitary.

Your employer can provide you with proper PPE but cannot watch you all day to ensure you USE it. PPE can be uncomfortable, cumbersome, and hot, but those are only inconveniences when compared to injury. Only you can be the one that ensures you go home to your family unharmed. It should be a condition of your employment that you wear PPE when required.

A good PPE program will provide instructions for MAINTAINING the equipment. This would include cleaning after use, proper storage, and replacement when necessary. This is a joint effort by your employer and you. The program should also provide instructions in proper fitting and wearing of PPE.

Personal protective equipment must be of safe design and construction for the work being performed. Just because the equipment has a sticker that says it meets OSHA standards doesn't mean it really does. OSHA does not certify equipment. Your employer must know and trust the manufacturer, you must question questionable equipment.

Don't take chances with your eyes—you might loose the gamble



"Employees shall be provided with eye and face protection equipment when machines or operations present potential eye or face injury from physical, chemical, or radiation agents."

This is the first paragraph of the eye and face protection rule for construction. It is one of the easiest and least expensive OSHA rules, yet, each year thousands of workers injure their eyes or loose their sight. Not because they didn't have the proper eye protection, but because they chose not to wear it.

Virtually all work in construction requires eye protection. The chances of being hit by a flying chip of metal or wood is great. Tasks such as welding or painting clean up require equipment providing protection from chemical spashes and radiation sources. In other words the potential (a key word in the rule) is nearly always there.

OSHA provides a very useful table in the construction rules at §1926.102. "Table — Eye and Face Protector Selection Guide" lists many possible operations that require eye and face protection, the hazards the operation present and the recommended protectors. Your employer is required to use this table when selecting appropriate equipment. Some examples in the table are:

EYE AND FACE PROTECTOR SELECTION GUIDE

Operation	Hazards	Recommended protectors
Chemical handling	Splash, acid burns, fumes	Goggles, flexible fitting, hooded ventilation; Face shield (for severe exposure add face shield over goggles).
Chipping	Flying particles	Goggles, flexible fitting, regular ventilation; Chipping goggles; Spectacles with sideshields.
Spot welding	Flying particles, sparks	Goggles, cushioned fitting, rigid body; Spectacles, plastic frame, w/sideshields; Face shield.

Two other tables provide filter lens shade numbers for protection against radiant energy (welding), and selecting laser safety glass.

Other OSHA eye and face safety rules you should be aware of are:

- If you wear glasses you must wear one of the following when eye safety equipment is required: (1) safety glasses whose protective lenses provide optical correction, (2) goggles that can be worn over corrective glasses without disturbing the adjustment of the glasses, or (3) goggles that incorporate corrective lenses mounted behind the protective lenses.
- Face and eye protection equipment must be kept clean and in good repair. Structural or optical defects is prohibited.

Eye and face protectors must also meet specific requirements. They must:

- Provide adequate protection against the particular hazards for which they are designed.
- Be reasonably comfortable when worn under the designated conditions.
- Fit snugly and not unduly interfere with your movements.
- You must be able to disinfect them.
- Be distinctly marked providing manufacturer identification. When the manufacturer places limitations or precautions on the equipment, your employer must tell to you, and you must observe them.

Hearing loss caused by noise is permanent!

Construction sites are noisy places, especially during certain phases of a project. Exposure to high noise levels can cause hearing loss or impairment. It can also:

- Create physical and psychological stress.
- Lower morale.
- Reduce efficiency.
- Cause annoyance.
- Interfere with concentration.
- Cause fatigue.

There is no cure for noise-induced hearing loss. It is permanent and cannot be treated medically. The prevention of excessive noise exposure is the only way to avoid hearing damage.

It is your employer's responsibility to provide you with hearing protection when noise levels, or duration of the noise, cannot be reduced below the permissible noise exposures found in the OSHA rules (see Table 1). It is your responsibility to wear the protection.

But the requirements do not stop there. In fact, there are three phases for employers to go through or consider to fully protect their employees.

Employee training

Your employer must instruct you how to recognize and avoid unsafe conditions, and make you aware of the rules that apply to your work environment. This training helps to control or eliminate hazards or other exposure to illness or injury.

This includes noise that can cause hearing loss. It is important that you know the severity of certain types of noise and if they can damage your hearing. You must know when to use protection and what kind really works.

Hearing protection

Whenever it is not possible to reduce noise levels, or the length of time you are exposed to harmful levels, ear protection devices must be provided and used.

Ear protective devices inserted in the ear must be fitted or determined individually by a competent person. A competent person is one who is trained in ear protection fitting and can recognize the difference between a good and poor fit.

Hearing conservation program

The OSHA rules require your company to:

- Have information (or personally measure) the noise created by different machines and operations at your construction site. Measurements should be taken with a standard sound level meter, at slow response, measured on the A-scale.
- Try to reduce the sound levels through administrative (shift rotation or exposure limitation), or engineering methods (antivibration machine mountings, acoustical enclosures), to those shown in the chart.
- If administrative or engineering methods fail, personal protective equipment must be provided and used to reduce sound levels within the levels of the table.

Where the sound levels exceed the values in the chart, a continuing, effective hearing conservation program must be implemented. A hearing conservation program must contain the following elements:

- Monitoring of employee noise exposures.
- Audiograms administered on a periodic basis and their evaluation.
- Training of workers on the effects of noise.
- The meaning of the audiograms.
- The use, care, and benefits of the hearing protection provided.
- Proper recordkeeping.

As with any safety and health program, all members of the organization must be involved. Once again, hearing loss caused by noise is permanent!

Table 1-Permissible Noise Exposures

Duration per day, hours	Sound level dBA slow response
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

Safety footwear at construction sites

In the construction regulations the order of the day is not necessarily "safety shoes" but "foot protection when necessary." What's the difference? In some work situations, safety shoes may not be required. In accordance with 29 CFR 1926.28—a performance oriented rule—use of personal protective equipment is required when there is exposure to hazardous conditions, or other OSHA standards indicate the need for such equipment.

However, when the wearing of safety shoes makes it impossible for you to perform your work, or exposes, you to more hazardous conditions, you are not required to use the equipment. One example OSHA gives is ironworkers climbing structural columns, erecting reinforcing steel, or performing other work where foot protection would reduce their safety. In such a case, capped or steel toe permanently inserted foot protection would not be required.

But, in normal, everyday work we would all agree that safety shoes are required in most situations at your worksite. When you do wear safety shoes the OSHA rules require that your shoes meet the requirements of American National Standard for Men's Safety-Toe Footwear, Z41.1-1967.

Personal protective equipment for your feet

Foot protection is designed to guard your toes, ankles, and feet from injury. Safety shoes come in many varieties to suit very specific work applications. Here are descriptions of some types of safety footwear.

Safety shoes

Standard safety shoes have toes that meet testing requirements found in the ANSI standard. Steel, reinforced plastic, and hard rubber are used for safety toes, depending on the shoes intended use.

Sole puncture resistant footwear

Safety shoes with puncture-resistant soles protect against penetration by sharp objects. A good case can be made that construction workers should always wear puncture-resistant footwear.

Metatarsal guards

Shoes with metatarsal or instep guards protect the upper foot from impacts. The metal guards extend over the foot rather than just over the toes.

Conductive shoes

Conductive shoes permit built-up static electricity to dissepate harmlessly into the ground. These shoes are often worn by workers in munitions facilities or refineries. Do not use these shoes if you work near open electrical circuits.

Safety boots

Rubber or plastic safety boots offer protection against oil, water, acids, corrosives, and other industrial chemicals. They are also available with features like steel-toe caps, puncture-resistant insoles, and metatarsal guards. Some rubber boots are made to be pulled over regular safety shoes.

Electrical hazard shoes

Under dry conditions, electrical hazard shoes offer shock hazard protection from contact with open circuits of 600 volts or less. These shoes are used in areas where employees work on live or potentially live electrical circuits. The toebox is insulated from the shoe so there is no exposed metal. These shoes are most effective when dry and in good repair.

Static dissipative shoes

Static dissipative footwear is designed to reduce accumulation of excess static electricity by conducting body charge to ground while maintaining a sufficiently high level of resistance to protect you from electrical shock due to live electrical circuits.

Respiratory protection—an OSHA overview

Hazards to the lungs are not always easy to detect. Some of the most common hazards are the lack of oxygen and the presence of harmful dusts, fogs, smokes, mists, fumes, gases, vapors, or sprays, including substances that may cause cancer, lung impairment, other diseases, or death. Respirators help prevent the entry of harmful substances in to your lungs.

However, the prevention of worksite air contamination should first be accomplished, as far as possible, by engineering controls such as:

- Enclosing or confining the contaminant-producing operation.
- Exhausting the contaminant (ventilation).
- Substituting with less toxic materials.

When effective engineering controls are not practical, or when the engineering controls are being installed, or during cleanup operations, appropriate respirators must be used.

You must always be aware that respirators have their limitations and are not a substitute for effective engineering controls. Where respirators are necessary for your health protection, your company must have a respiratory program to overcome any potential respirator problems and to ensure the effectiveness of the equipment. OSHA rules for the use of respirators in construction and for setting up a respirator program are found at 29 CFR Part 1926.103.

Your employer is responsible for setting up an effective respirator program, and understanding that different hazards require different respirators. You are responsible for wearing the respirator and complying with the program.

You must be aware that:

- Your equipment does not eliminate the hazard.
- If your equipment fails, over-exposure will occur. To reduce the possibility of failure, equipment must fit properly and be maintained in a clean and serviceable condition.

You and your employer must understand:

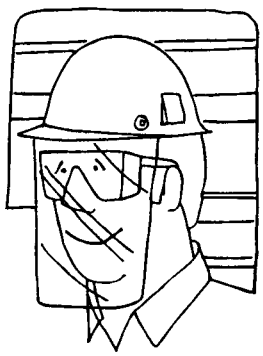
- The equipment's purpose and its limitations.
- That the equipment must not be altered or removed even for a short time, even if it is uncomfortable.

When you are required to wear respirators because administrative or engineering controls do not achieve full compliance, your company must have a respirator program. An effective respirator program will provide you with:

- Training.
- Fit testing.
- Inspection, cleaning, maintenance, and storage procedures.
- Selection methods.

If you use respirators, treat them well, and respect hazardous atmospheres. Someday, that combination could save your life.

Use your head wisely—protect it with your hard hat



Thousands of head injuries occur each year in the construction industry. In fact, the Occupational Safety and Health Administration (OSHA) found that from 1985 to 1988, 3.2% (11, 685) of all construction lost-time accidents in ten states were related to head injuries. Injuries range from major concussion to death, minor abrasions to trauma, or even electrocution.

Hard hats lessen these kinds of injuries because they are designed with a hard outer shell and a suspension system inside. In this way, hard hats protect your head from impact and penetration of falling objects and, in some cases, from high-voltage electric shock and burns. Moreover, hard hats can also help shield your head and hair from entanglement in machinery or exposure to environments.

What to look for in a safety hard hat

- Based on hard hat class and type, select a hard hat which meets the criteria you need for protection from impact, penetration, electrical conductivity, flammability and other safety hazards. The American National Standards Institute (ANSI) standard Z89.1-1969 places hard hats into three classes:

  Class A for general service with limited voltage protection (i.e., building construction).

  Class B for utility service with high-voltage protection (i.e., electrical workers).

  Class C for special service with no voltage protection (i.e., construction with no electrical hazards).

ANSI also specifies two types of hard hats:

Type 1 has a full brim, at least 1 1/4 inch wide.

Type 2 has no brim but may include a peak extending forward from the crown.

- Purchase a hard hat only if it identifies the manufacturer's name, the ANSI designation (Z89.1), either class A, B, or C.
- Do not purchase a metal hard hat; it is an electrical conductor and does not meet OSHA requirements and ANSI standards.
- Check for quality in design, materials, construction, comfort, and adjustability.

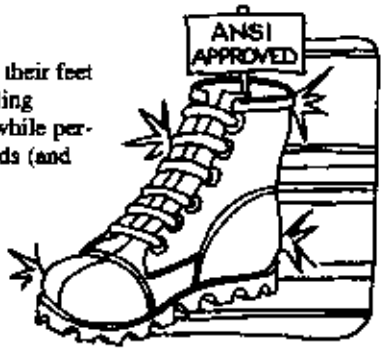
Take care of your hard hat and it will take care of you

- Check your hard hat for cracks (including hairline), dents, and wear, each time you use it. Throw away hard hats that are cracked, or that look chalky or dull.
- Wash your helmet (especially the sweatbands and cradles) once a month in warm, soapy water and rinse thoroughly. Be careful not to use solvents that can damage the shell; consult the hard hat manufacturer to find out what solvent you should use.
- Avoid painting your hard hat because paint contains solvents that may reduce the dielectric properties or affect the shell.
- Pay special attention to the condition of the suspension system because of the important part it plays in absorbing the shock of a blow. Look for torn cradle straps, broken sewing lines, loose rivets, defective lugs, and other defects. Sweatbands are easily replaced.

Always work at working safely. Remember to wear your hard hat, and wear it properly—with the peak to the front.

Tool Box Talks Safety Tips

Proper safety footwear prevents injuries



Every day hundreds of workers in the U.S. suffer disabling injuries to their feet and toes. In fact, foot and toe injuries make up 10 percent of all disabling injuries. Most of those injured were not wearing protective footwear while performing their jobs. If your site has one or more of the following hazards (and most sites do), you should have proper safety footwear.

Compression— foot or toe is squeezed or rolled over.

Puncture— a sharp object like a nail breaks through the sole.

Electricity—a hazard in jobs where workers use power tools or electric equipment.

Slipping—contact with surface hazards like oil, water or chemicals that cause falls.

Chemicals—chemicals and solvents corrode ordinary safety shoes and can harm your feet.

Extreme heat or cold—insulation or ventilation is required depending on climate.

Wetness—hazard may be slipping, discomfort, and even fungal infections.

Protect your feet and toes from hazards by following these rules of thumb.

- Select a shoe or boot designed to protect the foot and toes in areas most likely to be injured. Designs include:

  Safety toe—prevents compression wounds.

  Cushion between toe cap and foot—offers comfort and insulation.

  Steel insole—prevents puncture wounds.

  Material of the sole—prevents specific hazards depending on the material.

  Aluminum, steel, or plastic instep protection—protects the top of the foot and the front of the ankle.

  Insulation—protects from heat or cold.

  Water resistance—protects against wetness.

  Ankle protection—protects your ankles.

- Purchase a shoe or boot that meets American National Standards Institute's requirements (ANSI Z41.1-1967). This is the only way to ensure your shoe or boot will protect your feet.
- If you can not get shoes at a regular shoe store, check to see if your company invites a shoemobile to the job site. Or order safety footwear from a catalog.
- Check out the different types of safety footwear available, including :

  Safety boots—rubber/plastic, steel-toed, with puncture resistant insoles, and metatarsal guards.

  Electric hazard shoes—with insulated toebox so there is no exposed metal.

  Conductive shoes—with rubber or cork heels, no exposed metal parts, and a calf-to-heel conductor.

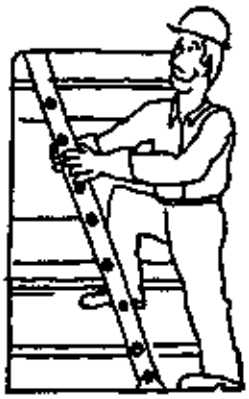
  Non-conductive shoes—with rubber soles and no metal parts, so they insulate your feet from the ground.

  Add-on foot protection—with guards, covers, inserts, cleats, or sandals attached to shoes for various hazards.

- Stamp out fallacies about safety footwear, including they're ugly, uncomfortable, clumsy, expensive, and not very protective. Promoting proper footwear may save you and coworkers from a disabeling injury.

Tool Box Talks Safety Tips

Using Ladders Safely



Ladders are an everyday tool you can't live without. However, if your ladder is not kept in good working order and not inspected frequently it can become dangerous and even a killer. Here are some special tips for keeping your ladder in top notch condition and keeping you safe.

Inspection Before Use

- Check your ladder for loose, broken, or missing parts before you climb. Check a wooden ladder for split rails or dangerous splinters. Check metal ladders for corrosion.
- Ensure your ladder is free of oil, grease or any other slippery materials.

If you find a ladder in poor condition, "Don't Use It." Report it to your supervisor.

Using Your Ladder

- Don't build "ladders" from chairs, benches or boxes.
- Don't place a ladder on boxes or blocks to make it taller.
- Choose the right ladder for the intended job.
- Ensure your ladder is long enough to extend 36" above the upper ladder support. If this is not possible, tie it off at the top.
- Do not use a metal ladder if there is danger of electrical contact.
- Set your ladder on a flat secure surface and against a solid support.
- Make sure your ladder is not in a doorway or walkway. If it is, put up a warning barrier.
- Use the 4 to 1 rule when setting up your ladder. The distance between the base of your ladder and the wall should be one fourth the height of the ladder.
- Face front and use both hands as you climb. Hoist tools or materials after you've climbed up.
- One person on a ladder at a time!
- Don't overreach from a ladder. If your belt buckle is higher than the top of the ladder, you're up too far. Get off and move the ladder to get closer to the job.
- Don't stand on top of a step ladder. The belt buckle rule applies here too.
- Never lean out on a ladder unsafely. Move the ladder if necessary.

Take care of your ladder, use it safely, and it will serve you long and well.

What Do I Do In a Medical Emergency?

Emergencies are unpredictable. They can happen to anyone, anywhere, at any time. Workers who know first aid are able to react calmly and skillfully in emergency situations. You may be the only one to administer immediate first aid. Knowing what to do is important. Knowing what not to do is just as important.

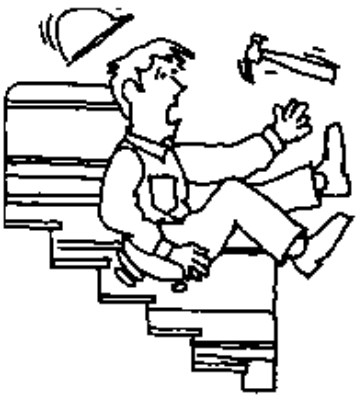
Here are some of the basics of immediate first aid. They are not a replacement for formal training in first aid or CPR. Take the time necessary to get training. Someday you will be glad you did.

- **Look the situation over carefully.** Don't become a casualty yourself. Then—get the victim away from any danger source such as water, fire, or downed power lines.
- **Call for help.** If you are not alone have someone go for help immediately. If you are alone, immediate care is priority. However, that immediate care may be going for help.
- **Do not move the victim** if there is any chance of spine or neck injury unless it is a life threatening situation where you must.
- **Look for signs of life** and give artificial respiration or CPR if necessary and if you have been trained. Be sure help is on the way before starting CPR. Do not tilt the victims head back if you suspect neck injury.
- **Control heavy bleeding.** Stop the flow of blood by direct pressure, elevating the injury above the heart or pressure points. Do not use a tourniquet unless the person is in danger of bleeding to death and you've been trained to apply one.
- **Treat for shock.** Signs of shock include cold, pale skin, a rapid, faint pulse, nausea, rapid breathing and weakness. To treat for shock: keep victim lying down, cover only enough to maintain body heat, don't move victim unless absolutely necessary, get medical help immediately.
- **Treat for choking.** A person can choke to death in a couple of minutes. You can tell if a person is choking if he or she can't speak, cough or breathe. If the person is choking, use the Heimlich Maneuver.

These are just a few of the many situations you may encounter on your job. Quick, calm and correct action can prevent injury, keep an injury from getting worse and even save lives. Review these general tips.

- Know your limitations, give only the first aid you are qualified to perform.
- In the event of a medical emergency, always get qualified medical attention quickly.
- In any emergency, give urgent care first.
- Don't try to give CPR unless you have been trained to do so.
- Always bring help to the victim; do not move an injured person unless absolutely necessary.
- Know where first aid kits are kept.

Tool Box Talks Safety Tips



Tips for Suspension Scaffold Safety and Fall Protection

Falls are one of the leading causes of worker death and approximately 20 percent of these fatalities occur while working from a scaffold. Workers who use suspension scaffolds (i.e., one or more working platforms suspended by ropes or other means from an overhead structure) are at the greatest risk.

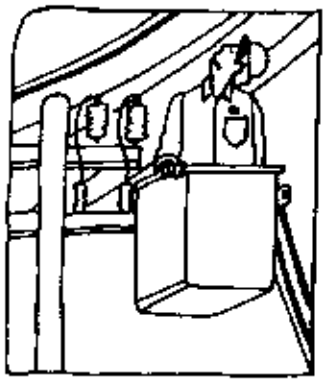
Falls frequently occur as the result of improper installation or operation of scaffold equipment, defective scaffold equipment, insufficient worker safety training, or failure to provide or use personal fall protection equipment.

Here is a list of precautions you should take to prevent serious injuries and fatal falls while working from suspension scaffolds:

- Comply with current and proposed OSHA regulations for working with scaffolds. Proposed regulations include requirements for all scaffolds regarding capacity, construction, access, use, and fall protection.
- Ensure that design and construction of scaffolds conform with OSHA regulations.
- Shield scaffold suspension ropes and body belt or harness system droplines (lifelines) from hot or corrosive processes, and protect them from sharp edges or abrasion.
- Inspect all scaffolds, scaffold components, and personal fall protection equipment before each use.
- Provide personal fall protection equipment and make sure that it is used by all workers on suspension scaffolds. When working from a scaffold, always use fall protection (both guardrail systems and body belt or harness systems).
- Use structurally sound portions of buildings or other structures to anchor droplines for body belt or harness systems and tiebacks for suspension scaffold support devices.
- Secure droplines and tiebacks to separate anchor points on structural members.
- Provide proper training for all workers who use any type of suspension scaffold or fall protection equipment. If you work from a scaffold, participate in any training programs offered by your employer.
- Follow scaffold manufacturers' guidance regarding the assembly, rigging, and use of scaffolds.

Tool Box Talks Safety Tips

Fall protection from scissors lifts, aerial lifts, and rough terrain forklifts—



When you work six feet or more above a lower surface you must be protected from falling. The requirements and various possible methods of protection are direct and to the point in OSHA's fall protection rules.

However, there are exceptions. The fall protection rules do not cover you if you are working from an aerial lift, scissors lift, or a platform mounted on a forklift. Your employer must look to other OSHA rules, or other standards, to provide you the necessary protection. The following OSHA rules, and excerpts from letters to employers are some of the requirements for fall protection for employees.

One distinction OSHA makes with regards to aerial and scissors lifts is whether the entire boom mounted platform can be positioned outside the wheel base. If it can, such as in the case of aerial lifts, then body belt/harness systems are required. Otherwise, it falls into the scissors lift category. The reason for this requirement is the possibility of being bounced out of a basket or off a platform, or the ability to climb out of the basket or off the platform.

Aerial lifts

Aerial lifts are vehicle mounted elevating and rotating work platforms. They are sometimes called extensible or articulating boom supported platforms, aerial ladders, vertical towers or a combination of any of these. They are sometimes called bucket trucks.

A body belt shall be worn and a lanyard attached to the boom or basket when working from an aerial lift.

Scissors lifts

Neither the OSHA standards nor the applicable American National Standards Institute (ANSI) standard (A92.6-1990) requires employees on scissors lifts to use body belts while on platforms equipped with guardrails. If guardrails are removed or ineffective, then other means of fall protection must be provided.

Rough terrain fork trucks

Work platforms attached to the forks of rough terrain forklifts are allowed, provided guardrails, proper platform strength, stability, and attachment are provided.

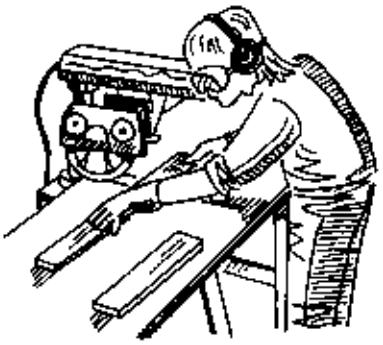
However, OSHA could issue citations for the following safety violations:

- No scaffold shall be erected, moved, dismantled, or altered except under the supervision of competent persons.
- Guardrails and toeboards shall be installed on all open sides and ends of platforms more than 10 feet above the ground or floor. Scaffolds 4 to 10 feet in height, having a minimum horizontal dimension in either direction of less than 45 inches, shall have standard guardrails installed on all open sides and ends of the platform.
- All planking shall be scaffold grades, or equivalent, as recognized by approved grading rules for the species of wood used. The maximum permissible spans for 2- x 10-inch or wider planks shall be as shown in the OSHA regulations.
- All planking of platforms shall be overlapped (minimum 12 inches), or secured from movement. Although a pallet cannot move sideways, it can slide forward.

When you are working from scissors, aerial, or forklift mounted lifts remember these rules and check yourself out. Has your employer provided you with the proper protection? If so, are you using it?

Tool Box Talks Safety Tips

Pinch points—they can be annoying, they can be deadly, but they can be defeated



When you think of the word pinch, what comes to mind? You might possibly think of being annoyed by a family member playfully pinching you, or a minor accident with a tool at home. What you don't normally think of is a disabling injury to your hands or toes.

At work, pinch points are those situations where machines, hand tools, and conditions put our hands, feet, and sometimes our entire body in danger. An injury can come from something as small as a pair of pliers, or as large as an excavator. Most tools have, or can cause pinch points. It might surprise you to know that hand injuries alone account for one third of the millions of disabling on-the-job accidents occurring each year. Most of these hand injuries are caused by pinch points—80% of them in fact.

So how do we protect ourselves and our fellow workers from pinch points? I would suggest there are three major things we can do. They are: (1) awareness, (2) physical barriers, and (3) personal protective equipment.

Awareness

All around us are things and activities that can cause us to be injured by pinch points. Many cannot be avoided, but if you are constantly alert you can protect yourself from injuries. Awareness comes in two forms, a common sense alertness of the right thing to do, and training in the correct way to do things and use equipment. Some examples are:

- When moving heavy equipment, you know you can injure your hands and feet, so why not wear gloves and safety shoes?
- When working with hand tools such as chisels, screwdrivers, and hammers use the right personal protective equipment.

Physical barriers

At construction sites physical barriers might be anything from the machine guard on your table saw to barricades around an excavator. Physical barriers are there to protect you from injury, not prohibit your activity. Guards are important to protect you from direct contact with moving parts, flying chips, kickbacks and splashing of metal or harmful liquids. Barricades are placed at construction sites to warn you of dangerous situations. They are not to be ignored.

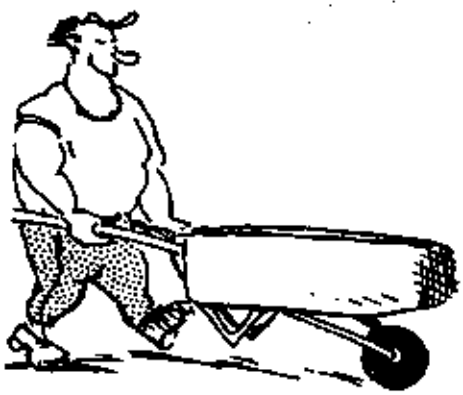
It takes knowledge and insight to properly prepare equipment for maintenance or storage. Blocks are used to prevent equipment from rolling and heavy parts from falling. Never remove them unless you know why they are there, and the reason for being there is completed. Always check for fellow workers in harm's way before removing blocks.

Personal protective equipment

Smart workers look at their personal protective equipment—their steel-toed safety shoes, gloves, hard hat, and safety glasses—as equipment that allows them to go home uninjured at the end of the day. Stupid workers look at personal protective equipment as an annoyance and only use it when the boss is looking.

Avoiding and protecting against pinch points can, on a good day, take up a lot of time. But if you apply common sense and awareness, respect physical barriers and guards, and use your personal protective equipment, you just might make it through the work day without being pinched.

Tool Box Talks Safety Tips



Wheelbarrow and Hand Truck Safety

Wheelbarrows and handtrucks are tools we use often to make life easier at our worksites.

With these tools our worksite can be a warehouse, loading and unloading equipment; a construction site, moving dirt, concrete, or bricks; at home, working in the yard or loading a truck on moving day.

Wheelbarrows and handtrucks can be a great help when used properly, but can be a source of frustration and injury when not.

Picking up an "out of balance" handtruck or wheelbarrow usually means you will be loading it again. It can also mean injury.

This *Safety Selection* offers some suggestions to prevent frustration and injury when using these tools.

Hand Trucks

- Inspect your handtruck before use. It is a good idea to keep maintenance records for each piece of equipment.
- Gloves should be worn.
- When loading, keep feet clear of the wheels. Do not use your foot to hold a truck in place.
- Keep the center of gravity of the load as low as possible. Put heavy objects below the lighter ones.
- Place the load well forward so the weight will be carried by the axle, not the handles.
- Do not overload your hand truck. Your chin was not made to balance boxes and you need to see where you are going.
- If you load or unload a truck while it is in a horizontal position, raise or lower it by keeping your back straight and using leg muscles.
- Never walk backwards with a handtruck. When going down an incline, keep the truck ahead. When going up, keep it behind.
- Ensure your truck is not left where it will become a trip hazard for someone else.

Wheelbarrows

- Wear gloves.
- Never overload a wheelbarrow or attempt to move more than you are physically able to handle.
- Balance the load over the wheels.
- Plan ahead. Examine the route you are going to take. Avoid obstacles in your path that can throw the wheelbarrow off balance and tip your load.
- When you raise and lower the handles, keep your back and arms straight and your knees bent. Make use of your leg muscles.
- Keep a tight grip on the handles and keep your speed under control.
- Never store a wheelbarrow where it becomes a trip hazard.

Tool Box Talks Safety Tips

Safety Selections For The Construction Industry

The Safety Selections series can be used to conduct periodic safety meetings at the construction site. The material may be used by the foreman or other instructor as the basis for the safety discussion and the text of Safety Selections can be copied and distributed to workers as a handy reminder.

Fire Safety—Protecting Your Employees and Your Investment

Protecting employees from workplace hazards, including fires, is your job as an employer/supervisor. Protecting your investment at your construction sites is another incentive for a good fire protection and prevention program.

Of course, it is always a joint effort by you the employer and you the employee. The fact is, when employees are given the right tools, in this case fire fighting equipment and fire fighting training, they will do their job and do it with professionalism.

Fires will never be completely eliminated but there are many things you can do to reduce the chances of fire at your worksite.

Fire Protection & Prevention - Employer

- Develop a fire protection program and provide adequate firefighting equipment.
- Conspicuously locate all firefighting equipment at the construction site.
- Inspect firefighting equipment periodically and maintain in accordance with OSHA regulations.
- Provide training in the general principles of fire fighting and use of fire extinguishers upon initial employment and at least yearly thereafter.
- Provide properly rated, correct kinds, and adequate numbers of fire extinguishes at your construction site (29 CFR 1926.150).
- Establish an alarm system, telephone, siren, etc., so employees and the local fire department can be alerted for an emergency. Codes and reporting instructions shall be conspicuously posted.
- Prohibit smoking at or in the vicinity of fire hazards and conspicuously post a sign that reads: "No Smoking or Open Flame."

Fire Protection & Prevention - Employee

- Maintain access to fire fighting equipment at all times. Never lay materials where they cover or prevent access to the equipment.
- All materials shall be stored, handled, and piled with due regard to their fire characteristics.
- Storage shall not obstruct, or adversely affect, means of exit.
- Keep storage site free from accumulation of unnecessary combustible materials.
- Combustible scrap and debris shall be removed at regular intervals during the course of construction.
- No combustible material shall be stored outdoors within 10 feet of a building or structure.
- Use containers provided for the collection and separation of waste, trash, oily and used rags, and other refuse. Containers used for garbage and other oily, flammable, or hazardous wastes, shall be equipped with covers.
- Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids.
- Locate engine powered equipment so that exhausts are well away from combustible materials.

Note: This Safety Selection is a partial listing of the requirements of 29 CFR Subpart F—Fire Protection and Prevention and 1926.25—Housekeeping.

Tool Box Talks Safety Tips

***Safety Selections* For The Construction Industry**

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Crane safety—balancing the load

To a crane operator, few experiences can be as frightening as a crane becoming unbalanced while lifting a load or having a crane collapse under the weight of an excessive load. Even if you are a certified crane operator, assume nothing. You must be familiar with your equipment and know its capabilities. It is critical.

The following crane operation pointers were derived from crane incident reports from Department of Energy worksites.

- Be trained in and qualified to operate the specific piece of equipment you will operate.

  Completion of a training course does not necessarily mean you are qualified. Training isn't complete until proficiency can be consistently demonstrated.

  The operator in one of the Department of Energy incidents was a certified crane operator but unfamiliar with the equipment. He did not know it had a fifth outrigger. Using this fifth outrigger would have prevented the incident.

- Do not "estimate" your load weight. Know what it is and ensure it does not exceed the crane's capacity.

  One way to check the load weight is to check shipping papers or other documentation.

- Ensure all calculations regarding a lift is correct. For example, the book distance should be measured from the crane's centerline of rotation, not from the base of the boom.

- When lowering your boom, ensure you do not lower it too far and thereby shift the crane's center of gravity.

  Other causes of crane unbalance or collapse are:

- Not knowing the manufacturer's operating instructions and limitations.

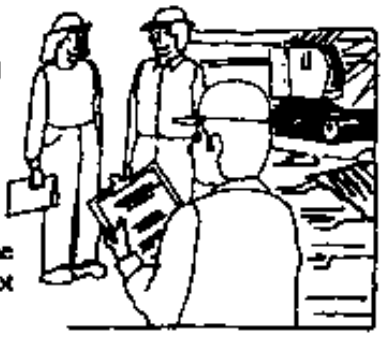
- Damaged equipment: Pre-operational inspection can reveal damaged booms. Look for cracked, bent, or deformed plates or welds. Cracked or flaking paint may be a sign of a damaged boom.

- Careless operation: The slightest touch of the boom on an object such as a wall, or a load hitting the boom, can cause the boom to collapse. Use your signal-man religiously.

- Ground stability: Prior to a lift ensure the ground is not soft and is reasonably level. Ensure correct sized outrigger floats are used.

- Dismantling procedures: Booms can be damaged and collapse during dismanteling operations.

Off-road vehicles—a piece of the safety pie that is sometimes forgotten



Operating big construction equipment can only be a dream for some of us, and we are envious of those that get to. But, getting to dig, push, haul, raise, and swing stuff at your construction site can be dangerous, and on many occasions, deadly.

All too often we turn on the news to see a sad story of an "experienced crane operator" who hit a power line, or an "inexperienced" young person who got to use a dozer for the first time, tipped it over and was crushed to death.

This review checklist can be a memory juggler to remind you of some of the critical issues involved in heavy equipment operation at your worksite.

Equipment—General Requirements

- ❑ All equipment left unattended at night, next to a highway in normal use, or next to a construction area where work is in progress, must have appropriate lights or reflectors, or lighted or reflective barricades, to identify it.
- ❑ Whenever the equipment is parked, the parking brake must be set. Equipment parked on inclines must have the wheels chocked and the parking brake set.
- ❑ All equipment must comply with the requirements of crane regulations at §1926.550(a)(15) when working or being moved in the vicinity of power lines or energized transmitters.

Motor vehicles

Motor vehicles as covered by this part are those vehicles that operate within an off-highway jobsite, not open to public traffic.

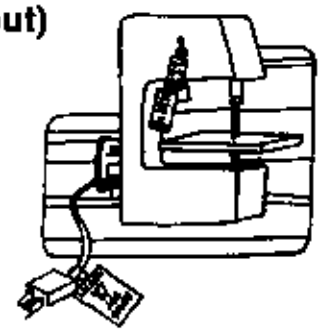
- ❑ All vehicles shall have a service brake, emergency brake, and parking brake. They may use common components, and must be maintained in operable condition.
- ❑ No employee shall use any motor vehicle equipment having an obstructed view to the rear unless:
  The vehicle has a reverse signal alarm audible above the surrounding noise level, or;
  The vehicle is backed up only when an observer signals that it is safe to do so.
- ❑ Vehicles used to transport employees shall have a firmly secured seat for each person being carried.
- ❑ All vehicles in use must be checked at the beginning of each shift to make sure that all parts, equipment, and accessories that affect safe operation are in proper operating condition and free from defects. All defects must be fixed before the vehicle is used.

Material handling equipment

- ❑ All bidirectional machines such as rollers, compacters, front-end loaders, bulldozers, and similar equipment, must be equipped with a working horn loud enough to be heard above and different from the surrounding noise. The horn must be operated as needed when the machine is moving in either direction.
- ❑ Industrial trucks shall meet the requirements of §1926.600 and the following:
  Lift trucks, stackers, etc., must have the rated capacity clearly posted on the vehicle so as to be clearly visible to the operator.
  When alternate removable counterweights are provided by the manufacturer, corresponding rate capacities also shall be clearly shown on the vehicle. These ratings must not be exceeded.
  Don't take your "big" machines for granted. Be an example for your coworkers, practice safety and know the regulations.

Tool Box Talks Safety Tips

Controlling hazardous energy (lockout/tagout)



Lockout/tagout procedures are designed to prevent injury and death caused by the accidental release of energy.

The primary use of lockout/tagout procedures in construction is for the locking out of electrical energy. Other energy sources you should consider having procedures for are: mechanical, pneumatic, fluid and gasses, hydraulic, thermal, and water under pressure.

Some examples of systems and equipment that should require lockout/tagout procedures could include: portable electrical equipment and their circuits, cords, junction boxes, etc.; compressors; mixers; and pumps.

Lockout

Lockout is the process of blocking the flow of energy from a power source to a piece of equipment, and keeping it blocked out. Lockout is accomplished by installing a lockout device at the power source so that equipment powered by that source cannot be operated. A lockout device is a lock, block, or chain that keeps a valve or lever in the off position.

The use of lockout devices is a more reliable means of deenergizing equipment than tagout and, whenever possible, should be the preferred method.

The use of lockout devices provides a more secure and more effective means of protecting employees from the unexpected release of hazardous energy or startup of machines and equipment.

Tagout

Tagout is accomplished by placing a tag on the power source. The tag acts as a warning not to restore energy—it is not a physical restraint. Tags must clearly state "DO NOT OPERATE" or the like, and must be applied by hand.

Both locks and tags must be strong enough to prevent unauthorized removal and to withstand various environmental conditions.

What do the regs say?

Some of the requirements of §1926.417—Lockout and tagging of circuits are:

- Tags must be placed on controls that are to be deactivated during the course of work on energized or deenergized equipment or circuits.
- Deenergized equipment or circuits must be rendered inoperative and have tags attached at all points where such equipment or circuits can be energized.
- Tags must be placed to identify plainly the equipment or circuits being worked on.
- While any employee is exposed to contact with parts of fixed electric equipment or circuits which have been deenergized, the circuits energizing the parts shall be locked out or tagged or both.

Lockout/tagout procedures are outlined in §1926.417(d). Your employer is required to maintain a written copy of the lockout/tagout procedures for your company and must make it available for inspection by employees and OSHA.

Lockout/tagout procedures can also be found in §1926.702—Requirements for equipment and tools (Concrete and Masonry Construction). They read: No employee shall be permitted to perform maintenance or repair activity on equipment (such as compressors, mixers, screens or pumps used for concrete and masonry construction activities) where the inadvertent operation of the equipment could occur and cause injury, unless all potentially hazardous energy sources have been locked out and tagged.

Preventing electrical accidents—electrical safety from OSHA's point of view

With the wide use of portable tools on construction sites, the use of extension cords is necessary. Hazards are created when cords, cord connectors, and receptacles are improperly used and maintained. The most common electrical hazard is the ground fault electrical shock.

For this reason OSHA has determined that your employer must use:

- Ground-fault circuit interrupters (GFCI's) for receptacle outlets in use and not part of the permanent wiring of the structure; or
- An assured equipment grounding conductor program covering all cord sets (extension cords), receptacles that are not part of the permanent wiring of the structure, and equipment connected by cord and plug that are for use or used by employees.

By the way this requirement is the #3 most violated rule in the construction regulations with 1622 citations given in 1994.

Although the rules require either of the above safety methods at your site, the best method would be to have both systems in place at the same time.

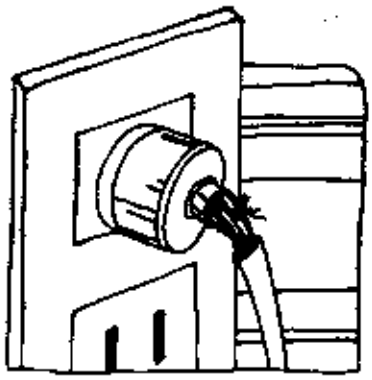
Let's take a look at these two protective systems.

Ground Fault Circuit Interrupters

Although most portable electric tools have an equipment grounding conductor and many are double insulated these methods are not 100% safe. A grounding wire could break or a cord could become defective. Using GFCI's overcomes these problems.

A GFCI is a fast-acting circuit breaker that senses small imbalances in the circuit caused by current leakage to ground and, in a fraction of a second, shuts off the electricity.

Although the GFCI does not protect you from line-to-line hazards (holding two hot or one hot and one neutral wire) it does provide protection against the most common form of electrical shock hazard—the ground fault.



Assured Equipment Grounding Conductor Program

The assured equipment grounding conductor program is an inspection program covering all cord sets, receptacles that are not a part of the permanent wiring of the structure, and equipment connected by cord and plug that is available for use or is used by employees.

This program is an inspection program and the electrical equipment listed in the program must be visually inspected for damage or defects before each days use.

Two tests are required by OSHA before first use, after any repairs, after damage is suspected to have occurred, and at 3-month intervals, they are:

- A continuity test to ensure that the equipment grounding conductor is electrically continuous.
  - The test must be performed on receptacles that are not part of the permanent wiring of the building or structure, on all cord sets, and on cord-and plug-connected equipment that is required to be grounded.
- A test to ensure that the equipment grounding conductor is connected to its proper terminal.
  - This test must be performed on receptacles and plugs.

Even if your employer has an assured equipment grounding conductor program, it would still be to your benefit to personally check your equipment and the socket and wiring for insulation breakdown. Check for exposed wires, scuffed insulation on extension cords for wires wearing through, and broken or exposed wiring before use.

Tool Box Talks Safety Tips

OSHA rules reach to the water's edge

Whenever you do construction work over or near water, and the danger of drowning exists, there are certain precautions you and your employer must take to be in compliance with OSHA rules.

In the event you fall into the water and you do not have a personal flotation device, permanent brain damage can occur within three to four minutes of oxygen deprivation.

The OSHA rules require:

- U. S. Coast Guard approved life jackets or buoyant work vests.
  - Prior to and after each use, the vest or life jacket must be inspected for defects which would alter their strength or buoyancy. Defective equipment must not be used.
- Readily available ring buoys with at least 90 feet of line. The distance between ring buoys must not exceed 200 feet.
- At least one lifesaving skiff must be immediately available at locations where employees are working over or adjacent to water.

OSHA considers a lifesaving skiff to be immediately available when:

- The skiff is in the water or capable of being quickly launched by one person.
- At least one person is present that is specifically designated to respond to water emergencies and operate the skiff.
- Another operator is designated to provide the same coverage if the primary operator leaves the area.
- Tasks the skiff operator is assigned to do will not interfere with the operator's ability to quickly reach the skiff and get underway.
- A communication system, such as a walkie-talkie, is used to inform the skiff operator of an emergency and where the skiff is needed.
- The skiff is equipped with both a motor and oars.

When considering the number of skiffs that should be available, and the appropriate maximum response time for rescue operations, the following factors must be evaluated:

- The number of work locations where the water dangers exist and the distance to those locations.
- Water situations such as temperature, currents, rapids, dams, and water intakes.

Remember, if you are working on a bridge and not constantly protected from falls into the water where the danger of drowning exists, you are required to wear a life jacket or buoyant work vest at all times.

Tool Box Talks Safety Tips

Excavations—working safely "down under"

Working around and in excavations is one of the most dangerous jobs in the construction industry. There are many hazards you can run into, but most can be placed into three categories: underground utilities, confined space hazards, and cave-ins. Cave-ins claim 80 to 100 lives every year. That is because the earth naturally wants to self-level. The goal of a good excavation site is to keep that earth back so that the job can be done.

As the company protects you and your co-workers, you can follow these safety measures to doubly protect yourself:

- **Be alert for changing conditions:** Cave-ins are usually the result of: 1) changes in weather that alter soil stability, 2) vibrations caused by construction activity, 3) movement of buildings near excavation sites, and 4) unsafe work habits.
- **Understand soil types:**
  - *Stable Rock:* Natural solid mineral material that can be excavated with vertical sides and will remain intact while exposed. Uses a vertical excavation slope.
  - *Type A:* Cohesive (sticks together) soils like clay, silty clay, sandy clay, clay loam, hardpan, till, and caliche. Not subject to vibration. Not disturbed. Not near water. Uses a steep excavation slope ($^3/_4$:1).
  - *Type B:* Cohesive soils like silt, silt loam, sandy loam, and unstable or fissured Type A soil. Has a bit more moisture than Type A. Could be subject to vibration and disruption. Uses a moderate excavation slope (1:1).
  - *Type C:* Granular soils like gravel, sand, loamy sand, submerged soil, and soil from which water is freely seeping, and submerged rock that is not stable. Uses a gentle excavation slope ($1^1/_2$:1).
- **Always wear the proper safety equipment:** Wear your hard hat, safety glasses, safety shoes, and other required safety equipment. When exposed to vehicle traffic, wear a reflectorized or highly visible warning vest or other suitable clothing.
- **Use caution near the excavation edge:** Keep materials or equipment that might fall or roll into an excavation at least two feet from the edge. Equipment operators must pay attention to warning barricades, hand or mechanical signals, or stop logs which alert him/her of the edge.
- **Work inside adequately protected excavations:** Protective systems are needed for excavations five feet deep or more. Systems must protect you from falling rock, soil, and equipment. Do not go underneath bridging walkways or loads handled by heavy equipment. Exits (ramps/ladders) must be within 25 feet of workers in excavations four feet deep or more. Do not work in excavations where water is accumulating or has accumulated unless you and your company take adequate precautions. Mount heavy equipment on wooden platforms to minimize surface vibrations. Don't climb on shoring.
- **Use adequate walkways if required to cross over an excavation.**
- **Know your company's emergency response procedures:** Emergency rescue equipment is required when hazardous air is present or may reasonably be expected to develop. In case an accident occurs, your company procedure should include designations for immediate rescue person(s), person(s) who will notify authorities, rescue personnel advisors, emergency response equipment available, and trainees.
- **Know your company's blasting signals:** Generally a warning signal is three short sounds.
- **Listen to the "competent person":** A competent person: 1) inspects the excavation and any hazards, 2) classifies soil types, 3) has the authority to eliminate hazards, and 4) may direct emergency response.

This *Safety Selection* was contributed by Tricia Hodkiewicz, Technical Editor, J. J. Keller and Associates, Inc.

Silicosis Fact Sheet for Construction Workers

Important information for Construction Workers on Deadly but Preventable Dust Exposure

Silicosis is lung damage caused by breathing dust containing extremely fine particles of crystalline silica. Crystalline silica is found in materials such as concrete, masonry, and rock. When these materials are made into a fine dust and suspended in the air, breathing in these fine particles can produce lung damage. Silicosis can lead to heart failure and increase the risk of other diseases such as TB (tuberculosis).

What are the symptoms of silicosis?

- Initially there may be no symptoms, but as the disease progresses you may have difficulty in breathing and other chest symptoms such as a cough.
- Infectious complications may cause fever, weight loss, and night sweats.
- Severe mycobacterial or fungal infections can complicate silicosis and may be fatal.

See a doctor if you experience these symptoms and suspect that you are exposed to crystalline silica.

How do construction workers get exposed?

Most crystalline silica comes in the form of quartz. Common sand can be as much as 100% quartz. Concrete and masonry products contain quartz in the form of sand. Some activities in which quartz dust may be present in the air include:

- Abrasive blasting using silica sand as the abrasive.
- Abrasive blasting of concrete.
- Chipping, hammering, drilling, crushing, loading, hauling, and dumping rock.
- Chipping, hammering, drilling, sawing, and grinding concrete or masonry.
- Demolition of concrete and masonry structures.
- Dry sweeping or pressurized air blowing of concrete or sand dust.

How is silicosis prevented?

Not allowing dust to get in the air is the key to silicosis prevention. A simple control may work. Example: A water hose to wet dust down where and when it is created. Here are some other steps your employer and you can take to protect yourself and your fellow workers:

- Use dust collection systems which are available for many types of dust generating equipment.
- When sawing concrete or masonry use saws that provide water to the blade.
- During rock drilling use water through the drill stem to reduce the amount of dust in the air.
- Use local exhaust ventilation to prevent dust from being released into the air.
- Minimize exposures to nearby workers by using good work practices.
- Use abrasives containing less than 1% crystalline silica during abrasive blasting to prevent harmful quartz dust from being released in the air.
- Measure dust levels in the air.
- Use respirators when required, not as primary protection but when all possible controls are in place and the dust levels are above the National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Level.

Medical examinations

All workers breathing crystalline silica dust should have a medical examination that includes a:

- Chest x-ray.
- Pulmonary function test.
- Annual evaluation for TB.

Trenchwork—being your own boss

It is true that your company competent person must inspect any and all excavations, adjacent areas, and protective systems each day for evidence of a situation that could result in: (1) possible cave-ins, (2) indications of failure of protective systems, (3) hazardous atmospheres, and (4) other hazardous conditions.

It is also true that these inspections must be made by your competent person: (1) prior to the start of work each day, (2) as needed throughout the shift, and (3) after every rainstorm or other hazard-increasing occurrence.

Your competent person must have specific training in and be knowledgeable about soil analysis, the use of protective systems, and all other requirements of the standard, and have authorization to take prompt corrective measures to eliminate a hazard.

This should give you 100% confidence that you are totally safe when you are working in an excavation, right? Wrong! Even if all of the above precautions are taken, a sudden change could mean disaster for you and fellow workers.

Some of the things that could cause an immediate change at an excavation site are:

- A bulldozer or excavator coming too close to your trench and causing a surcharge (overloading) and stress cracks at or near the edge of the trench.
- A sudden downpour could fill the trench and cause rain soaked soil to give way.
- Accidently striking an underground utility line with a tool presenting an immediate electrocution or hazardous atmosphere.

These are just some of the incidents that need immediate attention and decision-making. All of a sudden you are your own boss. Your choices could mean the difference between life or death for yourself and your fellow workers.

That is why the OSHA rules require your company to train you in the recognition and avoidance of unsafe conditions, the regulations applicable to your work environment, and the ability to control or eliminate any hazards or other exposure to illness or injury.

Excavation work is one of the most dangerous in construction. Your knowledge could make a life or death difference.

Some of the situations you need to constantly be aware of are:

- Tension cracks in sidewalls, slopes, and surfaces adjacent to the excavation.
- Ground settlement or sinking.
- Changes in wall slope or bulging.
- Increase in strut loads.
- Spalling (breaking off in slabs) or sloughing (crumbling or falling away) of soils.
- Excessive seepage and piping of fine soils.
- Softening of sidewalls.
- Boiling of trench bottom.
- Creaking or popping sounds.
- Visual deformation of bracing system or trench.

Any of these signs indicates it is time to leave the trench and call for an inspection. Getting a job done on time or being a macho man under these adverse conditions is not a brave thing to do. You can probably guess what it really is.

Tool Box Talks Safety Tips

Home safety—Ten tips to protect your children from pesticide and lead poisoning

The #1 goal of jobsite safety is to send you home in the same healthy condition you reported to work in. Although safety is everyones' job, you probably have a "safety guru" around to keep you honest.

But when you get home guess who becomes the safety manager? You guessed it! The roles reverse and now you are the guru. The job you do becomes important, not only to your family, but most of all to you.

One area of home safety you should be concerned with, especially if you have young children, is poison. The below simple steps, offered by the U.S. EPA Office of Pesticide Programs, can help you protect children from environmental hazards around your home.

1. Always store pesticides and other household chemicals, including chlorine bleach, out of children's reach—preferably in a locked cabinet.
2. Always read directions carefully because pesticide products, household cleaning products, and pet products can be "dangerous" or ineffective if too much or too little is used.
3. Before applying pesticides or other household chemicals, remove children and their toys, as well as pets, from the area. Keep children and pets away until the pesticide has dried or as long as is recommended on the label.
4. If your use of a pesticide or other household chemical is interrupted (perhaps by a phone call), properly reclose the container and remove it from children's reach. Always use household products in child-resistant packaging.
5. Never transfer pesticides to other containers that children may associate with food or drink (like soda bottles), and never place rodent or insect baits where small children can get to them.
6. When applying insect repellents to children, read all directions first; do not apply over cuts, wounds or irritated skin; do not apply to eyes, mouth, hands or directly on the face; and use just enough to cover exposed skin or clothing, but do not use under clothing.
7. Wash children's hands, bottles, pacifiers and toys often, and regularly clean floors, window sills, and other surfaces to reduce potential exposure to lead dust.
8. Get your child tested for lead if you suspect he or she has been exposed to lead in either your home or neighborhood.
9. Inquire about lead hazards. When buying or renting a home or apartment built before 1978, the seller or landlord is now required to disclose known lead hazards.
10. If you suspect that lead-based paint has been used in your home or if you plan to remodel or renovate, get your home tested. Do not attempt to remove lead paint yourself. Call 1-800-424-LEAD for guidelines.

For more information about pesticides, contact the National Pesticide Telecommunications Network at 800-858-7378. For more information about lead, call the National Lead Information Center at 1-800-LEADFYI.

Tool Box Talks Safety Tips

National Institute for Occupational Safety and Health (NIOSH) ALERT

Small gasoline engines are a deadly source of carbon monoxide poisoning

Enclosed spaces and small gasoline-powered equipment can be a deadly combination. Even when the space is apparently well ventilated, enclosed or partially enclosed areas can put you at risk of serious illness and even death from carbon monoxide poisoning. You need to recognize the danger of using small gasoline-powered engines indoors.

Carbon monoxide (CO) is a lethal poison. It is one of many chemicals found in engine exhaust and can rapidly accumulate. Because CO is colorless, tasteless, odorless, and nonirritating, it can overcome you without warning. It causes weakness and confusion, inhibiting your ability to escape the hazardous environment.

Indoor or enclosed use of equipment such as high-pressure washers, concrete cutting saws, power trowels, floor buffers, welders, pumps, compressors, and generators can be deadly even with windows and doors open and an exhaust fan running.

The bottom line recommendations from NIOSH and the Occupational Safety and Health Administration (OSHA) is: When you have an opportunity to use small gasoline-powered engines indoors, DON'T.

Some of the things you should be aware of when using gasoline-powered equipment are:

Do NOT use or operate gasoline-powered engines or tools inside buildings or in partially enclosed areas unless they can be located outside and away from air intake ducts.

Learn to recognize the signs and symptoms of CO overexposure: headache, nausea, weakness, dizziness, visual disturbances, changes in personality, and loss of consciousness. Any of these signs and symptoms can occur within minutes after the equipment is turned on.

Consider the use of tools powered by electricity or compressed air if they are available and can be used safely.

Use personal CO monitors, equipped with audible alarms, where potential sources of CO exist.

If you have any symptoms, immediately turn off your equipment and go outdoors, or to a place with uncontaminated air.

Call 911 or another local emergency number for medical attention or assistance if symptoms occur. Do NOT drive a motor vehicle. Get someone else to drive you to a health care facility.

Stay away from the work area until the tool has been deactivated and measured CO concentrations are below accepted guidelines and standards.

Watch coworkers for signs of CO toxicity.

Your employer should:

Conduct a workplace survey to identify all potential sources of CO exposure.

Educate workers about the sources and conditions that may result in CO poisoning.

Always substitute less hazardous equipment if possible.

Use equipment that allows for the placement of gasoline-powered engines outdoors and a safe distance from exhaust air entering the building.

Monitor employee CO exposure to determine the extent of the hazard.

In 1994, a previously healthy 59-year old owner/operator of a flooring installation business experienced headache and dizziness after working 2 hours in the stairwell of a building where a gasoline-powered generator was running. He left the building and rested in his car. Upon returning to the stairwell, he collapsed in a grand mal seizure related to CO poisoning.

Tool Box Talks Safety Tips

Machine guards—essential safety protection

Crushed hands, severed fingers, blindness—the list of possible machinery-related injuries is as long as it is horrifying. There seem to be as many hazards created by moving parts as there are types of machines. Guards are essential for protecting you from needless and preventable injuries.

A good rule to remember is: Any machine part, function, or process which may cause injury must be safeguarded. When the operation of a machine or accidental contact with it can injure you, or others in the vicinity, the hazards must be controlled or eliminated.

The OSHA rules say:

All hand and power tools and similar equipment, whether furnished by your employer or yourself, must be maintained in a safe condition. This means:

- When power operated tools are designed to have guards, they must be installed when in use.
- When you are using hand and power tools and are exposed to the hazard of falling, flying, abrasive, and splashing objects, you must be provided with the particular personal protective equipment necessary to protect you from the hazard. This includes machine guards.

Areas requiring guards

Dangerous moving parts in three areas require safeguarding. They are:

Point of operation: That area on a machine where work is being done on material, such as cutting, shaping, boring, or forming of stock.

Some examples of machines that usually require point of operation guarding are: table saws, joiners, circular saws, and abrasive wheels.

Power transmission apparatus: All components of the mechanical system transmitting energy to the point of operation. These components include flywheels, pulleys, belts, connecting rods, couplings, cams, spindles, chains, cranks, and gears.

Other moving parts: All parts of the machine which move while the machine is working. These can include reciprocating, rotating, and transverse moving parts, as well as feed mechanisms and auxiliary parts of the machine.

Requirements for safeguards

What must a guard do to protect you against mechanical hazards?

Prevent contact: The guard must prevent hands, arms, and any other part of your body from making contact with dangerous moving parts.

Security: You should not be able to remove or tamper with the guard. A safety conscious worker would not want to do this anyhow. Guards must be made of durable material that can withstand normal use, and they must be firmly secured to the tool.

Create no new hazards: A guard defeats its own purpose if it creates a hazard of its own such as a jagged edge. The edges of guards should be rolled or bolted in such a way that they eliminate sharp edges.

Protect from falling objects: The guard should ensure that no objects can fall into moving parts. A small tool or piece of material dropped into a cycling machine could easily become a projectile.

Look at machine guards in new light—they're there to help you make it home at the end of the day with the same number of appendages that you came to work with.

Tool Box Talks Safety Tips

Caution is a good word for work in confined spaces

Each day thousands of construction workers are exposed to possible injury or death in what OSHA calls confined or enclosed spaces—spaces that have a limited means of getting out, can gather toxic or flammable gases and vapors, or have oxygen-deficient air.

Examples of confined spaces include storage tanks, ventilation and exhaust ducts, sewers, underground utility vaults, excavations, manholes, tunnels, and open top spaces more than four feet in depth, such as pits.

Confined spaces should always be considered hazardous until checked out!

Hazards in confined spaces can be separated into two categories: physical and atmospheric.

Physical hazards can be present because of mechanical or electrical energy sources, or be from communication problems that make it hard to hear important directions or warnings. Dangers may also be present from cave-ins or water entering the space from heavy rain. Another physical hazard is heat. Temperatures can build up quickly and cause exhaustion or dizziness.

Atmospheric hazards—Most confined space accidents are related to atmospheric conditions inside the space. The primary risk is oxygen deficiency. Oxygen is reduced in a space by being replaced by another gas such as methane, or being used up. Oxygen consumption can be caused by combustion of flammable substances, as in welding, cutting, or brazing. A confined space can also be "oxygen-rich" which is also highly flammable.

Toxic or flammable gases or vapors may be present from previous contents such as tank coatings, cleaning agents, or preservatives, and can cause a fire or explosion. The work being performed could also give off a toxic gas. An example of this would be a welding operation that gives off carbon monoxide and oxides of nitrogen and ozone. Fumes and vapors will ignite more quickly in the trapped air.

Before working in a confined space, precautions must be taken to prevent a fire or explosion by eliminating or controlling the source of ignition, or venting the air.

Ventilation

When you are welding, cutting, or heating in a confined space, ventilation must be provided to ensure oxygen, and toxic, or flammable air are at safe levels.

When you use heaters in confined spaces, special care must be taken to ensure proper combustion. You must have sufficient ventilation to prevent toxic gases to accumulate and heat to rise.

Working in Confined Spaces

If you are required to enter a confined space, your supervisor is required to instruct you as to:

- What kinds of hazards you may face and why those hazards are dangerous.
- The necessary precautions to take for each type of hazard.
- The use of any protective and/or emergency equipment and instruments required.

Your company should make it a practice to test the air every time you enter a confined space and on a regular basis during your stay for the presence of sufficient oxygen and absence of hazardous levels of toxic or combustible gases. Adequate precaution must be taken to prevent your exposure to:

- Air containing less than 19.5, or more than 23.5 percent oxygen.
- A concentration of a flammable gas or toxic air.

Work at Working Safely

You should always follow your company's confined space program and use protective equipment made available to you. If you follow the safety rules carefully, you will be able to work safely—even in confined spaces.

Tool Box Talks Safety Tips

Tips to protect yourself from the Nation's #1 workplace safety problem—back injuries

Preventing back injury is a major workplace challenge. According to the Bureau of Labor Statistics, more than one million workers suffer back injuries each year.

Lifting improperly is the largest single cause of back injury. You can prevent work related back injury by knowing and using proper lifting techniques.

Basics Of Good Lifting

With the amount of mechanical lifting equipment available today, most heavy objects are lifted by derricks, hoists, platforms, and other types of equipment. However, sometimes it is necessary to lift moderate to heavy objects by hand. Knowing the proper ways to lift can save you a great deal of pain and misery.

Do not attempt to carry loads that are clearly too heavy for you!

Planning ahead

Planning ahead makes sense. If you know certain loads will have to be carried from an unloading area, place the objects on racks, not on the ground, whenever possible. That way the load will not have to be lifted from the ground.

Make sure your path is clear of obstacles and that there are no hazards, such as holes or divits.

If the load can be split up into smaller ones, you're better off in doing that, even if it takes a few extra minutes.

Long objects, such as pipes and lumber, may not be heavy, but the weight might not be balanced and such lifting could also result in back sprain. Such objects should be carried by two people or more.

Keep your back as straight as possible. Bending from the waist can lead to back pain. Take frequent rest breaks to keep from getting back fatigue.

Test the weight by lifting at one of the corners. If the load is too heavy or awkward, get help from a fellow worker, or use a mechanical lifting device. If you have to lift, make sure you can handle the weight.

Bend the knees

This is the single most important rule when lifting moderate to heavy objects. When lifting a crate or box, your feet should be placed close to the object. If you have to work with your back, keep your knees bent and your back flat. Center yourself over the load, then bend your knees and get a good hand hold. Lift straight up, smoothly. Allow your legs, not your back, to do the work.

Do not twist or turn your body once you have made the lift

Keep the load close to your body, and keep it steady. Any sudden twisting or turning could injure your back.

Set the load down properly

It's just as important setting a load down as lifting it. Lower the load slowly by bending your knees, letting your legs do most of the work. Don't let go of the load until it is secure on the floor.

Always push, not pull the object when possible

When moving an object on rollers, for example, pushing puts less strain on the back and is safer, should the object tip.

Following these simple rules reduces your risk of injury to your back. If you have ever had back pain you know how important these rules are. If you have not suffered from back pain, following these rules will help assure that you may never have to.

Section 15:

Excavation & Trenching

Excavation and Trenching

Company Policy

_____ is dedicated to the protection of its employees from occupational injuries and illnesses. _____ is responsible for providing a safe working environment, and the employees have and assume the responsibility of working safely.

The objective of this program is to supplement the safety policy by providing specific standards regarding Excavation and Trenching, and to ensure that each employee is adequately trained and fully aware of safety procedures associated with Excavation and Trenching.

Elimination of injuries and illnesses improves employee morale, improves customer service, improves product quality, and reduces Workers' Compensation costs.

Company Name requires that excavation and trenching procedures be provided to and utilized by employees in the prevention of occupational injuries and illnesses.

_____ will conduct routine safety inspections of jobsites to ensure compliance with this program. _____ has the authority to enforce the PPE program in accordance to any and all _____ safety rules and applicable OSHA regulations. Competent persons shall be designated by management as necessary to comply with the requirements of the applicable OSHA standards.

Employees are required to comply with the guidelines set forth, and to comply with the instruction of \\\\\\\\\\\\\\\\\\\\\ In the event an unsafe condition arises in the absence of \\\\\\\\\\\\\\\\\\\\\\\\) employees shall alert the lead person on the jobsite immediately. Employees shall alert coworkers of any unsafe conditions that arise.

Any I_____ employee who disobeys and/or disregards the guidelines set forth in this program or the company's safety program shall be subject to disciplinary action.

Preface

_____ developed this program to protect employees from safety hazards during work in trenches and excavations. This program will make sure that:

- Departments that work in trenches or excavations know how to do this work safely;
- Departments that work in trenches or excavations have named one or more Project Managers to oversee this work for their department;
- The role of the Project Manager and workers is understood; and,
- Employees who work in excavations and trenches have been trained and know how to do their work safely.

This program explains the training that employees must have so that they can recognize and avoid hazards during excavation work. This program also explains the work practices they must follow while digging or working in or around an excavation.

The departmental Project Manager must ensure that:

- Approved procedures are followed;
- Employees entering excavations are trained and have been given the equipment they need to do their jobs safely; and,
- All required inspections and tests have been done, and have been properly recorded.

The employee must:

- Follow established procedures;
- Enter an excavation only after receiving training; and
- Demonstrate a complete understanding of the safe work practices that are to be followed while working in an excavation.

Introduction to the Program

The purpose of this program is to put in place work practices and procedures that will protect employees from excavation hazards. This is done by:

- Requiring each department that works in excavations to name one or more people to serve as their Project Manager.
- Training Project Managers so they understand their duties and their role.
- Requiring that all employees that work in excavations have been trained and are able to demonstrate a complete understanding of the safe work practices that are to followed while working in an excavation.

This program was written to meet the Occupational Safety and Health Administration (OSHA) requirements for this type of work.

Who Should Participate

All departments that work in or around excavations. The work done by a department will be overseen by their Project Manager.

- Workers who work in or around excavations.
- Contractor's personnel, since the work done by a Contractor can affect the safety of people working in or around excavations.

Program Elements

Training and Duties of Program Participants

All people that work in excavations shall be trained in what is required by this program. The departmental Project Manager will train their employees, and document such training, with assistance as needed from the person designated as responsible for company safety.

- Employees will be trained before they begin work in excavations.
- Employees will be retrained annually, when work procedures change, or if it appears that work is being done unsafely.

Training and Duties of Workers

All workers in excavations shall comply with this program. These workers shall receive training in:

- Safe work practices to be followed when working in excavations;
- The use of personal protective equipment required during work in excavations, such as safety shoes and hardhats;
- Safe work practices to be followed if a hazardous atmosphere is present in an excavation; and
- Emergency rescue methods and procedure for calling rescue services.

Training and Duties of the Project Manager

The Project Manager shall receive the training detailed above. The Project Manager shall also receive training on selecting the methods used to protect workers in an excavation. The Project Manager shall:

- Help schedule and train departmental employees.
- Inspect the worksite daily, or more often as needed to make sure that work site conditions are safe for employees to work in excavations.
- Determine the means of protection to be used for each excavation project.
- Assure that only approved protective systems and designs are used.

Safety Coordinator

The Excavation and Trenching Safety Program is managed by the Safety Coordinator. The Safety Coordinator will:

- Make sure that the program is keeping employees safe, and that the departments are doing excavation work in a safe manner.
- Help departments select equipment that will protect workers.
- Train Project Managers, and help the Project Managers train other departmental employees.
- Review and update the program as needed.

Specific Excavation Requirements

Utilities and Pre-work Site Inspection

The Project Manager shall inspect the site before the excavation is started. Special safety measures shall be taken as directed by the Project Manager.

- Underground sewer, telephone, gas, water and electric lines shall be located and clearly marked. The Project Manager shall arrange to have these utilities protected, removed or relocated as needed to do the work safely. The excavation work shall not be allowed to endanger the underground utility or the people doing the work. Utilities left in place that are exposed by the excavation shall be protected by barricades, shoring, or other supports as needed.
- Trees, brush, boulders or other objects at the surface that could harm employees working in the excavation shall be removed or supported.

Protection of the Public

The Project Manager shall assure that barricades, walkways, lighting and signs are used as needed to protect the public during excavation work.

- Guardrails, fences, or barricades shall be used at excavations next to walkways or driveways used by pedestrians or vehicles. Warning lights and area lighting shall be used from sunset to sunrise as needed to protect the public and employees.
- Wells, holes, pits, shafts and similar excavations shall be barricaded or covered and posted as needed to prevent unauthorized access. All temporary excavations of this type shall be backfilled as soon as possible.
- Walkways or bridges with guardrails shall be used where the general public is permitted to cross over excavations.

Protection of Workers in Excavations

The Project Manager shall assure that employees are protected from hazards that may arise during excavation work.

Excavation and Trenching Company Policy continued:

Means of Entry and Exit from the Excavation

Stairs, ladders or ramps shall be provided when employees enter excavations over 4 feet deep. The distance of travel in the trench to reach the stair, ladder or ramp must be less than 25 feet. Two or more means of exit shall be provided if the excavation is more than 20 feet deep.

Exposure to Vehicular Traffic

Employees exposed to vehicular traffic shall be given, and shall wear, warning vests or other suitable garments. These shall be marked with or made of high-visibility material. Warning vests worn by flagmen shall be red or orange, and shall be of reflectorized material if worn during night work.

Employee Exposure to Falling Loads

No employee shall work underneath loads handled by lifting or digging equipment. Employees shall stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials. Operators may remain in the cabs of vehicles being loaded or unloaded if the vehicles provide protection for the operator during loading and unloading operations.

Warning System for Mobile Equipment

A warning system (such as barricades, hand signals, or stop logs) shall be used when mobile equipment is operated next to the edge of an excavation if the operator does not have a clear, direct view of the edge of the excavation. If possible, the grade should be away from the excavation.

Hazardous Atmospheres

The Project Manager will test the atmosphere in excavations over 4 feet deep if a hazardous atmosphere is present or could develop. A hazardous atmosphere could develop, for example, in excavations in landfill areas, if hazardous materials are stored nearby, or in excavations near or containing gas pipelines. Suitable precautions will be taken by the Project Manager as necessary to protect employees.

Personal Protective Equipment (PPE)

The Project Manager shall ensure that all employees wear all required safety-related equipment as detailed in the following sections. Hardhats, safety eyewear, gloves, hearing protection, and fall protective devices shall be furnished by the Department. The Department may elect to furnish safety footwear, but shall, at a minimum, ensure that all employees conducting work in excavations are wearing approved safety footwear. PPE shall be inspected regularly by the employee for signs of wear or damage; damaged PPE shall be immediately repaired using approved parts or replaced.

- All employees working in trenches or excavations shall wear approved hardhats at all times.
- All employees working in trenches or excavations shall wear approved steel-toed shoes or boots.
- Employees exposed to flying fragments, dust, or other materials produced by drilling, sawing, sanding, grinding and similar operations shall wear, at a minimum, safety glasses with side shields.
- Employees exposed to hazards produced by welding, cutting, or brazing shall wear approved spectacles or a welding faceshield or helmet as determined by the Project Manager.
- Employees entering deep and confined footing excavations shall wear a harness with a lifeline securely attached to it. The lifeline shall be separate from any line used to handle materials. The lifeline shall be attended by a person at all times while the employee wearing the lifeline is in the excavation.
- Employees shall wear approved gloves or other suitable hand protection as determined by the Project Manager.
- Employees at the edge of an excavation 6 feet or more deep shall be protected from falling by guardrail systems, fences, barricades, or other approved means.

Walkways and Guardrails

Walkways shall be provided where employees or equipment are allowed to cross over excavations. Guardrails shall be provided on walkways used by the general public regardless of the height above the excavation. Guardrails shall be provided on walkways used only by on-site project personnel if the walkway is 4 feet or more above lower levels. If employees pass below a walkway, then guardrails and toeboards shall be provided.

Protection from Hazards Associated with Water Accumulation

Employees shall not work in excavations with standing water or where water is collecting unless prior approval or instruction is given by the Project Manager.

Stability of Adjacent Structures

The Project Manager will take precautions as needed to protect employees, nearby buildings or other structures. The precautions taken, such as shoring, bracing, or underpinning, will be constructed as directed by the Project Manager.

Excavation and Trenching Company Policy continued:

Protection of Employees from Falling Objects and Loose Rocks or Soil

The Project Manager will ensure that employees are protected from loose rock or soil that could fall or roll from an excavation face. Such protection shall consist of:

- Scaling to remove loose material;
- Installation of barricades such as wire mesh or timber as needed to stop and contain falling material; or
- Benching. Benching may be used, when practical, instead of barricades.

Employees shall not work above one another in an excavation where the danger of falling rock or earth exists.

Employees shall be protected from excavated materials, equipment or other materials that could pose a hazard by falling or rolling into an excavation. Employees shall take care that all materials or equipment are kept at least 2 feet from the edge of the excavation.

The Project Manager may require that restraining devices be used to prevent materials or equipment from falling or rolling into the excavation.

The Project Manager may require that materials and equipment need to be stored further than 2 feet from the edge of the excavation.

Employees shall take care to ensure that materials piled, grouped or stacked near the edge of an excavation are stable and self-supporting.

Inspection by the Project Manager

The Project Manager will inspect the excavation, work area around the excavation, and the protective systems used at least daily. This inspection shall be conducted by the Project Manager prior to the start of work and as needed throughout the shift. The Project Manager shall also inspect after every rainstorm or when other conditions occur that could increase the hazard to employees. These inspections are only required when the trench will be or is occupied by employees.

Requirements for Protective Systems

Protection of Employees in Excavations

Employees in an excavation shall be protected from cave-ins by:

- Sloping or sloping and benching the sides of the excavation;
- Use of trench shields; or
- Construction of trench supports.

The Project Manager shall determine the type of protection used. These protections are not required if:

- Excavations are made entirely in stable rock as determined by the Project Manager; or
- Excavations are less than 5 feet deep, and the Project Manager has looked at the excavation and found no sign of a potential cave-in.

Special caution shall be used when excavating next to any excavation backfilled earlier or next to any fill material.

The Project Manager shall ensure that materials and equipment used to protect employees from cave-ins shall be free from damage or defects.

Manufactured trench shields, trench boxes and other materials and equipment used for support systems shall be used and maintained in accordance with the manufacturer's recommendations.

If materials or equipment used for support systems are damaged, they shall be removed from service until re-approved for use by the Project Manager.

Installation and Removal of Support

Members of support systems shall be securely connected together to prevent sliding, falling, kickouts, or other potential hazards.

Support systems shall be installed and removed as directed by the Project Manager.

Before any part of the support system is removed, additional precautions shall be taken as directed by the Project Manager.

Removal of support systems shall begin at the bottom of the excavation. Support members shall be released slowly. If there is any sign of possible failure of other members of the structure, or possible cave-in of the sides of the excavation, the work shall be stopped. The work shall not resume until it has been examined by the Project Manager.

The excavation shall be backfilled as the support system is removed.

Additional Requirements for Support Systems for Trench Excavations

The Project Manager may allow up to 2 feet of soil to be removed from below the bottom of the support system. This work shall be halted if there is any loss of soil from behind or below the bottom of the support system.

The installation of a support system, if used, shall closely follow the excavation of the trench.

Shield Systems

Shields shall be installed in such a way that the shield will not move if there is any sudden soil movement against the shield.

Employees entering or exiting the areas protected by shields shall be protected from the hazard of cave-ins. Employees shall not walk in an unprotected section of an excavation to reach the shield.

Employees shall not be allowed in shields when shields are being installed, removed, or moved.

Additional Requirements for Shield Systems used in Trench Excavations

The Project Manager may allow up to 2 feet of soil to be removed from below the bottom of the support system. This work shall be halted if there is any loss of soil from behind or below the bottom of the support system.

Conclusion

All employees of _____ are required to comply with the rules set forth in this written program. This program is intended to provide the maximum protection for employees of _____.

Section 16:

Fall Protection

OSHA Subpart M - Fall Protection

Type of Fall Protection Allowed

TYPE OF WORK or situation requiring fall protection	Means Allowed for Providing Fall Protection									
	Guardrail Systems	Safety Net Systems	Fall Protection Plan	Warning Line Syst5ems	Controlled Access Zone	Covers	Positioning Device Syst5ems	Fences or Barricades	Safety Monitor Systems	Personal Fall-Arrest Systems
Unprotected sides and edges	X	X								X
Leading edges	X	X	X							X
Hoist areas	X									X
Holes	X					X				X
Form work and reinforcing steel		X					X			X
Ramps, runways and other walkways	X									
Excavation/Pits, shafts, wells	X					X		X		
Dangerous equipment/On or above	X	X								X
Overhead bricklaying and related work	X	X			X					X
Roofing work - low slope roof *	X	X		X					X	X
Steep roofs	X	X								X
Pre-cast concrete erection	X	X	X							X
Residential construction	X	X	X							X
Wall openings	X	X								X
Other walking and working systems	X	X								X

*or combination of these measures

OSHA Standards for the Construction Industry
Fall Protection Training Requirements (1926.503)

Section	Requirement	Yes	No	Comments
.503 (a)(1)	Is a training program in being for employees subject to fall hazards?			
.503 (a)(1)	Does the training program enable each employee to recognize fall hazards?			
.503 (a)(1)	Does the program provide training in the procedures to be followed to minimize fall hazards?			
.503 (a)(2)	Is the training program conducted by a competent person?			
.503 (a)(2)(i)	Is the competent person able to recognize the nature of fall hazards in the work area?			
.503 (a)(2)(ii)	Is the person familiar with the correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used?			
.503 (a)(2)(iii)	Is the person familiar with the use and operation of guardrail systems, personal fall-arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protections to be used?			
.503 (a)(2)(iv)	Is the competent person versed in the role of each employee when safely monitoring systems are used?			
.503 (a)(2)(v)	Does the competent person know the restrictions on the use of mechanical systems when performing roofing work on low-sloped roofs?			
.503 (a)(2)(vi)	Does the competent person know the correct procedures of handling and storage of equipment and materials?			
.503 (a)(2)(vi)	Does the competent person know the correct procedures for erecting overhead protection?			
.503 (a)(2)(vii)	Does the competent person know the role of employees in fall protection plans?			

OSHA Standards for the Construction Industry
Fall Protection Training Requirements (1926.503)

Section	Requirement	Yes	No	Comments
.503 (a)(2)(viii)	Does the competent person know the requirements in Subpart M?			
.503 (b)(1)	Is a written certification of training maintained?			
.503 (b)(1)	Does the certification include: - Names of trainees? - Date of training? - Signature of the trainer or the employer?			
.503 (b)(1)	When relying on training provided by a previous employer (or training provided prior to the effective date of this Subpart) does the certification contain the date the prior training was determined to be adequate?			
.503 (b)(2)	Is the most recent training certification kept on file?			
.503 (c)	Is retraining provided when the employer has reason to believe that any employees who have been trained do not have the understanding and skill required by paragraph (a)?			
.503 (c)(1)	Is retraining provided when changes in the workplace render previous training obsolete?			
.503 (c)(2)	Is retraining provided when changes are made in the fall protection systems or equipment that render previous training obsolete?			
.503 (c)(3)	Is retraining provided when an employee's actions indicate an inadequate knowledge of or skill in using fall protection systems.			

Ladder Safety

1. When used for access to upper landing surface, side rails must extend three feet above landing surface.
2. Used at an angle where horizontal distance from top support to foot of ladder is approximately 1/4 of working length of ladder.
3. Used on stable and level ground unless secured to prevent accidental movement.
4. Must not be used on slippery surfaces unless secured or provided with slip resistant feet.
5. Top step of a stepladder must not be used as a step.
6. Nonconductive side rails if used where workers or the ladder could contact exposed electricity.

Personal Protective Equipment

1. Hard hats to be worn when there is a possibility of falling or flying objects.
2. Eye protectors must be provided where machines or operation present the hazard of flying objects, glare, liquids, injurious radiation, or a combination of these hazards.

Fall Protection

1. Six feet or more above lower level, must have fall protection.
2. Effective January 1, 1998, body belts are not acceptable as part of a personal fall-arrest system.
3. Working from boom lift requires body harness and lanyard.

Fall Protection - Company Policy

_____ is dedicated to the protection of its employees from occupational injuries and illnesses. _____ is responsible for providing a safe working environment, and the employees have and assume the responsibility of working safely.

The objective of this program is to supplement the safety policy by providing specific standards regarding Fall Protection, and to ensure that each employee is adequately trained and fully aware of safety procedures associated with Fall Protection.

Elimination of injuries and illnesses improves employee morale, improves customer service, improves product quality, and reduces Workers' Compensation costs. Fall protection serves as a tool to increase employee protection, and to reduce jobsite hazards.

_____ requires that fall protection equipment be provided to and utilized by employees in the prevention of occupational injuries and illnesses.

_____ shall be designated as a "Competent Person" for fall protection, and shall conduct routine safety inspections of jobsites to ensure compliance with this program. _____ has the authority to enforce the Fall Protection program in accordance to any and all _____ safety rules and applicable OSHA regulations. Additional personnel shall be designated as competent persons for fall protection, as deemed necessary by management.

Employees are required to comply with the guidelines set forth, and to comply with the instruction of _____. In the event an unsafe condition arises in the absence of _____, employees shall alert the lead person on the jobsite immediately. Employees shall alert coworkers of any unsafe conditions that arise.

Any _____ employee who disobeys and/or disregards the guidelines set forth in this program or the company's safety program shall be subject to disciplinary action.

Fall Protection Requirements

- Except as set forth in 29CFR1926 Subpart R "Steel Erection," _____ employees engaged in construction activities 6 feet or more above lower levels shall be protected by guardrail systems, safety net system, or personal fall arrest system unless an alternative fall protection measure is utilized.

- When it is demonstrated that it is infeasible or creates a greater hazard to use one of these systems while performing a specific task, then _____ shall develop and implement a fall protection plan that meets the following requirements:

    - \\\\\\\\\\\\\\\\\\\\\\\\\ fall protection plan shall be prepared by _____ and developed specifically for the site where the residential construction work is being performed. The plan must be maintained up to date.

    - Any changes to the fall protection plan shall be approved by _____.

    - A copy of the fall protection plan with all approved changes shall be maintained at the job site.

    - The implementation of the fall protection plan shall be under the supervision of _____.

    - The fall protection plan shall document the reasons why the use of conventional fall protection systems is infeasible or why their use would create a greater hazard to employees.

    - The fall protection plan shall include a written discussion on why other measures taken to reduce or eliminate the fall hazard for employees will be utilized in lieu of conventional fall protection.

- The fall protection plan shall identify controlled access zones where conventional fall protection methods cannot be used.

- When no other measures are feasible a safety monitoring system shall be implemented.

- The fall protection plan shall identify employees working in controlled access zones (CAZ). Only properly trained and authorized employees shall work in a CAZ. No other _____ employees are allowed in the CAZ.

- In the event a _____ employee falls, or a near miss occurs, _____ shall perform an accident investigation to determine if new practices, procedures, or training needs to be implemented. _____ shall implement those changes to prevent similar types of falls or incidents.