

**SAFETY MANUAL
AND
HAZARD COMMUNICATION PLAN**



Safety Policy

Policy Statement

Windover Construction is sincerely interested in the safety and welfare of every one of its employees. As an employee, you will be required to follow instructions and safe practices.

Your supervisor enforces the safety rules of Windover Construction. These rules comply with owner/agency, state and federal regulations. If you have any questions about those rules or instructions you have been given, do not hesitate to ask your supervisor.

The best safety device on your job is you. You must also have regard for the worker next to you. Do not do anything that will jeopardize his or her safety.

Your complete cooperation is extremely important. Familiarize yourself with all the safe practices. The practices in this booklet are minimal, and additional requirements may be necessary for special circumstances. As your own 'safety person' your experience is valuable. Stay alert and think of what you are doing at all times.

Safety for all

This booklet will help you understand and comply with the safety requirements of your work. It is extremely important for you to understand that your work be done in a safe manner. If you do not know, stop. Ask your supervisor before you start work. Your constant effort can prevent accidents and make the job safer.

Safety is doing your best to perform your daily tasks in the safe manner you have been shown.

Safety is doing your best to protect people and equipment from hazards.

Safety is doing your best to follow all safety rules.

Safety is asking if you do not understand. During orientation, your supervisor will advise you on local safety requirements. If he fails to inform you, ask if there are special requirements.

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2 - HAZARD COMMUNICATION PLAN

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Your Safety Starts With You!

The safe work practices described in this booklet are for your protection. Read and observe them.

Accidents happen to those who are not prepared! Most accidents are caused by:

Lack of knowledge, inattention, thoughtlessness

- Know How to Do Your Job:
 1. Check your work area to determine what problems or hazards may exist.
 2. Your activity may endanger other workers or nearby equipment and materials. Take necessary safeguards.
 3. Review the safety requirements of the assigned job.
 4. You will not be expected to do a job, which may result in injury to you and others.
- Safety rules cannot be changed unless life or property is in immediate danger, and permission is received from your supervisor.
- Take time to read and understand emergency procedures. Anticipate what you will do in case of an emergency. Above all, be calm.
- Wearing jewelry (rings, bracelets or neck chains) can cause serious injury.
- Report unsafe equipment, hazardous conditions and unsafe acts to your supervisor.
- Use safety equipment when it is specified for the job. Safety equipment is available through your supervisor or the field office.
- Practice good housekeeping in your work area. Pick up your tools. Do not leave materials and scrap where they will be hazardous to others.
- Obey all warning signs such as "Keep Out," "No Smoking," "Eye Protection Required" and "Authorized Personnel Only."
- Do not take shortcuts. Use appropriate ladders, ramps, stairways and paths.
- Do not use compressed air or oxygen to blow dust or dirt from clothing or skin.
- Use of hazardous substances requires prior instruction before utilization. Material safety data sheets (OSHA Form – 20 or equivalent) shall be provided for necessary materials involving potential hazards in their use, application or handling.
- Use of sanitary facilities provided on jobsites. Do not jump from elevated places.
- Failure to follow practices relating to your safety or the safety of other employees or failure to safeguard equipment, tools or materials properly may be grounds for dismissal.
- The use of seatbelts is required in all Windover Construction cars, pickup trucks, trucks and heavy equipment.
- Reflective safety vests will be worn when exposed to public vehicular traffic.

Superintendent Responsibilities

- Plan production so that all work will be done in compliance with established safety regulations.
- Be responsible for on-the-job safety and health. Secure the correction of safety deficiencies.
- Make sure proper safety materials and protective devices are available and used with all equipment in safe working order.
- Instruct foremen in safety requirements.
- Review accidents, supervise correction of unsafe practices, and file accident reports.
- Conduct jobsite safety meetings and provide employees with proper instruction on safety requirements.
- Require conformance to safety standards from subcontractors.
- Notify company office of safety violations.
- Provide for the protection of the public from company operations.
- Attempt to ensure safe performance by others present on the site, including owner, architect/engineer representatives, the general public, visitors, and the employees of other contractors.
- Secure prompt medical attention for any injured employees.
- Carry out safety programs at the work level.
- Be aware of all safety requirements and safe working practices.
- Plan all work activities to comply with the safe working practices.
- Instruct new employees and existing employees performing new tasks on safe working practices.
- Install and maintain devices to protect the public from company operations.
- Make sure protective equipment is available and used.
- Make sure work is performed in a safe manner and no unsafe conditions or equipment are present.
- Correct all hazards including unsafe acts and conditions that are within the scope of your position.
- Report all injuries and safety violations.
- Enforce all safety rules.
- Use checklist provided in Appendix A.

First Aid

Where First Aid facilities are provided, qualified personnel are available to render treatment and to maintain required records.

1. Report all injuries immediately, no matter how minor, to your supervisor and get necessary first aid.
2. Notify your supervisor and field office prior to leaving the jobsite because of injury or illness, whether it's personal or work related.
3. If you get outside medical treatment (without clearing through the field office) for work related injury or illness, you must notify your supervisor at the start of the next scheduled workday. Failure to do so may result in disallowance of your claim.
4. Prior to returning to work after a disabling injury or illness, you must present to your supervisor or field office a medical clearance from the attending physician.
5. Drugs, tranquilizers and insulin must not be taken on the job unless authorized in writing by your personal physician. A copy of this authorization should be in your personnel file.
6. Never move an injured or seriously ill person unless necessary to prevent further injury. Emergency steps for notifying Windover Construction are posted throughout the jobsite. Familiarize yourself with them. Non-designated employees should not administer first aid, except in the case of severe bleeding or cessation of breathing.
7. Never transport a seriously injured or ill person (i.e. head injuries, workers who have fallen, possible broken bones, worker with chest pain, loss of consciousness) in a personal or company vehicle. Contact 911 and follow their instructions.

Occupational Health

An effective occupational health program requires an unusual amount of cooperation and communication between each employee and Windover Construction. Your support is requested at all times. Every employee has a right to know what chemical or material hazards are being used in his/her workplace.

1. If you are required to use a chemical, cleaning solvent or any substance and you have not received instructions in how it is to be used, do the following:
 - Read the label to see what safety precautions should be taken.
 - Follow all safety precautions.
 - Don't start until you have the proper personal protective equipment required.
 - Ask your supervisor if you don't understand the directions or safety requirements.
2. Employees using respiratory equipment must have a clean-shaven face to ensure a proper fit.
3. Use only fresh, potable water for drinking and avoid any open source or common container.
4. Always use the provided sanitary facilities.
5. Never alter any personal protective device.
6. Ask your supervisor about any activity or condition that produces vapors, gases, dusts, or odors that are foreign to work environment.

Housekeeping

Good housekeeping is an important part of safety. It is the responsibility of all employees to practice good housekeeping.

1. Scrap materials and rubbish are fire and accident hazards. If these materials exist in excess in your work area, ask your supervisor to arrange for their removal.
2. Use trash barrels, which are located throughout the jobsite. If you need one in your immediate work area, notify your supervisor.
3. Return all surplus materials to the stockpile.
4. Do not leave tools and materials where they can create a hazard for others. Put them in the gang box or return them to the tool room.
5. Place oily rags in approved metal containers.
6. Wipe up spilled liquids immediately. If you cannot handle the problem, notify your supervisor so necessary cleanup can be arranged.
7. Do not let soiled cloths, food scraps, or food containers accumulate. If drinking cups are used, deposit them in containers provided. Place food wrappers, bags and other trash in these containers.
8. Toilets, wash-up facilities and drinking fountains are provided for convenience and comfort. Please help to keep them clean and sanitary. Report any problems to your supervisor.
9. Pull or bend over all nails. If possible, this should be done before material is piled or thrown down.
10. When opening crates or cartons, remove any nails or fasteners.
11. Keep all stairways, ladder landings, ramps, scaffolds, platforms, walkways and work areas free from loose materials and debris.

Safe Work Rules

1. Accidents, injuries or near misses, regardless of their nature, shall be reported to your supervisor for immediate action.
2. Regarding absenteeism, call your supervisor when you must be absent from work. A written statement from a doctor authorizing the continuation of regular duties is required for:
 - Any absenteeism for medical reasons resulting from any accidents or illnesses, and
 - Temporary medical condition, which may be hazardous to your safety and health, or that of other employees.
This includes, but is not limited to: hepatitis, measles, sprains, etc.
3. Clothing shall be appropriate to duties being performed. Loose or torn clothing should not be worn. Long pants, a shirt, and sturdy work shoes are the minimum requirements. No tank tops or tennis shoes.
4. Smoke only in approved areas. "Strike Anywhere" matches are prohibited.
5. Running is not permitted anywhere, except in the case of extreme emergency.
6. Safety glasses with side shields or face shields shall be worn on all concrete breaking, metal chipping, welding, grinding or other operations where eye protection is required.
7. Hand tools shall not be used for any purpose other than that intended and all damaged or worn parts shall be promptly repaired or replaced.
8. Only authorized personnel shall operate power tools, with guards furnished by the manufacturer "in place."
9. All electrical hand tools shall be grounded or double insulated.
10. Only delegated persons who have been instructed and trained for safe use shall use power activated tools.
11. Compressed gas cylinders shall be secured in an upright position. Acetylene cylinders must always be kept upright.
12. Use handcarts with cylinder restraints whenever possible to transport cylinders from one location to another.
13. Intoxicating beverages, unauthorized drugs, possession or use on the job, are strictly forbidden and constitute grounds for dismissal.

Safe Work Rules (continued)

14. Riding on equipment is prohibited. No person shall ride any hook, hoist or other material handling equipment, which is used strictly for handling material and not specifically designed to carry riders. Additional riders may only be carried where there is a seat available for them.
15. Only authorized personnel using appropriate individual protective equipment shall carry out welding and burning operations.
16. Horseplay, fighting, gambling and possession of firearms are strictly forbidden on the job and constitute grounds for dismissal.
17. All posted safety rules shall be obeyed and shall not be removed, except by management's authorization. Violation of these safety rules may be grounds for dismissal.

Employee Safety Requirements

To work without injury, good communication is necessary among you, your supervisor, your co-workers and others affected by your actions. Your supervisor will give safety instructions, pointing out the hazards of the job, and show how to prevent injury.

- **Study** the following basic safety requirements.
- **Start** with sections that apply to your work.
- **Carry** this handbook at all times.
- **Use** it to refresh your safety know-how whenever you meet different work situations.
- Ask your supervisor when you are not certain of the proper work procedure. You may endanger yourself and others by guessing.

Personal Protective Equipment

Personal protective equipment is available for your use. When equipment has been specified for certain work assignments or areas, you must use it.

1. All employees, visitors and vendors must wear an approved hard hat. No changes or modifications are to be made to the hardhat or suspension.
2. Sturdy work shoes are required. Footwear that has deteriorated to the point where it does not provide the required protection (tennis shoes, slippers, etc.) is not permitted in the work area.
3. Always wear approved life jackets when working over or adjacent to deep water.
4. Eye injuries are the most frequent type of injury for construction workers.
 - When exposed to flying or falling objects, dust, chemicals, concrete or harmful rays, appropriate eye protection is available and must be worn.
5. Hearing protection is mandatory in designated areas for specific tasks.
6. Respiratory protective equipment is required in areas where health hazards exist due to accumulation of dust, fumes, mists or vapors.

Personal Protective Equipment (continued)

7. Harnesses and lifelines must be used when other safeguards such as nets, planking, or scaffolding cannot be used. Be sure safety lines are independent of other rigging. The lanyard shall be secured at or above the level of the shoulders. Secure the line to something that provides an adequate anchorage – a point capable of supporting at least 5,000 pounds. If you have any questions, contact your supervisor.
8. Gloves must be worn when handling objects or substances, which could cut, rear or burn hands.
9. Rubber boots must be worn for work in concrete, or other hazardous substances.
10. Employees using insulated gloves must inspect them for defects prior to use.
11. Situations that may require unique safety equipment and special training should be discussed with your supervisor and/or the project safety supervisor prior to commencing work.

Work Surfaces/Walkways/Guardrails

1. Make every effort to keep your work area free from tripping hazards. Scrap material, protruding nails, holes in floor or platforms, welding leads, hoses, etc., should be removed from areas where you must stand or walk.
2. Temporary flooring or planks must be secured against displacement from strong winds or other forces.
3. Floor or platform planks that are temporarily removed for any reason must be replaced immediately following the work, which required their removal. Use barricades or rope off the area, if necessary.
4. Any floor opening into which a person can accidentally walk must either be covered or guarded by a standard railing.
5. Be sure the handrails and toe-boards meet standard requirements and are in good repair.
6. Do not stand or work from handrails. They are not designed for that purpose.
7. Watch for ice, mud or oil on ladders, scaffolds and work surfaces. Report any condition which you are not able to correct immediately.
8. If necessary to work over others, be especially careful to see that nothing can be dropped or displaced. Let them know you are there.
9. All wall openings less than 39 inches above a working surface through which a person could fall must be effectively guarded.
10. Open sides of floors or platforms more than 6' above the adjacent floor or ground must be effectively guarded.
11. Ramps, walkways and runways more than 4' above adjacent surface must be effectively guarded.
12. Guardrails on scaffolds must always extend to close off the ends of the platform.

Electrical

All temporary electrical equipment used on the job site will be listed by an approved testing laboratory (Underwriters Laboratories or Factory Mutual Laboratories) for specific application. All temporary electrical installations must conform to the National Electric Code.

1. All electrical tools and equipment must be grounded or double insulated.
2. Damaged or defective electrical tools must be returned to the tool room for repair.
3. Do not handle electrical equipment unless you are qualified and authorized to do so.
4. Temporary lighting used in damp and/or hazardous locations must be operated at a maximum of 12 volts.
5. You must not work on, or in proximity to, energized circuits of any voltage unless adequate safety measures have been taken.
6. Work on energized electrical equipment is prohibited. Only work on de-energized equipment is allowed. If it is infeasible to de-energize the equipment prior to work, Windover management must be notified.
7. Temporary electric cords must be covered or elevated. They must be kept clear of walkways or other locations where they may be exposed to damage or create tripping hazards.
8. Splices in electrical cords must retain the mechanical and dialectic strength of the original cable.
9. Temporary lighting must have guards over the bulbs. Broken or burned-out lamps must be replaced as soon as practical.
10. Energized wiring in junction boxes, circuit breaker panels and similar places must be covered when not being worked on.
11. Hazardous areas must be barricaded and appropriate warning signs posted.
12. All receptacle outlets must be protected by Ground Fault Interruption Circuitry or an Assured Equipment Grounding Program.
13. Arc Flash Hazards:

OSHA emphasizes that no work should be performed on live electrical equipment above 50 V, except where (1) de-energizing equipment would cause a greater safety hazard; or (2) where de-energizing is not possible due to equipment design or the nature of the work being performed. Economic infeasibility of de-energizing is not an adequate excuse for performing work on energized equipment.

Once equipment has been de-energized, OSHA requires that appropriate lockout/tagout procedures are followed to ensure that the equipment is not accidentally re-energized. Violations of lockout/tagout procedures are consistently among the top ten sources of OSHA citations.

OSHA considers arc flash to be a "recognized hazard" for which appropriate safety standards (most importantly, NFPA 70E) exist. While OSHA does not mandate that employers follow NFPA 70E, failure to do so may result in a citation in the event of an arc flash incident which NFPA 70E compliance could have prevented. In addition, various states have OSHA state plans which mandate compliance with NFPA 70E.

No work is to be done on energized equipment without first conferring with a Windover management representative.

Hand and Portable Power Tools

A worker is evaluated by the condition of tools and how they are used. Only tools in safe working condition will be issued. Comply with all of the manufacturer's instructions, and observe the following safe practices.

General

1. Inspect your tools prior to use to ensure they are in proper working order. Damaged or defective tools must be replaced.
2. Power saws, grinders and other power tools must have proper guards in place at all times. Removing guards or rendering them inoperative may be grounds for dismissal.
3. Power tools should be raised or lowered by a hand line, never by the cord or hose.
4. Cords and hoses must be kept out of walkway, and off stairs and ladders. They must not create a tripping hazard for employees or be subject to damage from equipment or material.
5. Disconnect tool from power source when changing bits, blades, discs, etc.

Electric Tools

1. All electric tools must be grounded and have the appropriate assured grounding conductor identification.
2. All electric cords and cables must be covered or elevated to protect them from damage, and eliminate tripping hazards.

Pneumatic Tools

1. An approved safety check valve must be installed at the manifold outlet of each supply line for hand-held pneumatic tools.
2. All pneumatic hose connections must be secure.
3. Safety clips or retainers must be installed on all pneumatic tools to prevent the tool's accidental expulsion from the barrel.

Fuel-Powered Tools

1. All fuel-powered tools must be shut down while being refueled.
2. Smoking is prohibited during refueling operations. Other nearby sources of ignition, such as burning and welding, must be halted during refueling.

Powder-Actuated Tools

1. Only employees possessing valid credentials are allowed to use powder-actuated tools.
2. Warning signs must be posted.

Material Handling, Storage and Disposal

All material must be properly stacked and secured to prevent sliding, falling or collapse. Aisles, stairs and passageways must be kept clear to allow safe movement of employees and equipment and provide access during emergencies.

1. Use proper lifting techniques when handling materials
 - Get down close to the load
 - Keep your back straight
 - Lift gradually, using your legs-do not jerk or twist.
 - Get help for bulky or heavy loads
2. Stored materials must not block any exits.
3. Material stored inside buildings or structures under construction must not be placed within six feet of any hoist way or other inside floor opening, or within 10 feet of any outer wall, which does not extend above the material stored.
4. Pipe, conduit and bar stock shall be stored in racks or stacked and blocked to prevent movement.
5. Materials must never be thrown or dropped from a distance of more than 20 feet. The drop area must be barricaded to protect personnel from being struck by falling materials. Trash chutes are required for dropping material from heights above 20 feet.
6. Protruding nails must be bent or pulled when stripping forms or uncrating materials.

Cranes, Hoists, Motor Vehicles, Elevators and Heavy Equipment

Our equipment is built for safe and economical operation, but is only as safe as the operator.

General

1. All cranes, hoists, motor vehicles, elevators, and heavy equipment must be operated and maintained to conform to established standards.
2. Prior to use on each shift, all cranes, hoists, motor vehicles, elevators and heavy equipment must be inspected. All defects must be repaired before the equipment is used.
3. Rated load capacity charts, recommended operating speeds, special hazard warnings, and other essential information must be conspicuously posted in all cranes, hoists, and other equipment.
4. Crane operators must take signals from only one person. However, in an emergency, a STOP signal can be given by anyone.
5. Only standard hand signals will be acknowledged.
6. Routine maintenance, refueling or repairs must not be done while the equipment is in use or the power on.
7. Wear a face shield when handling or recharging batteries or using jumper cables.

Cranes

1. Accessible areas within the swing radius of all cranes must be barricaded to prevent employees from being crushed by the counterweight.
2. Riding a hook or load is prohibited.
3. A fire extinguisher, rated at least five BC, shall be located in the cab of each crane.
4. Safety latches are required on all crane hooks.
5. Cranes or other equipment shall not be operated within 20 feet of energized electrical transmission or distribution lines. If it is necessary to operate the crane within 20 feet of power lines, then a Windover Construction management representative must be contacted and the site reviewed PRIOR to any crane operation.
6. During transit with no load and the boom lowered, the minimum equipment clearance must be: up to 4 feet for voltages up to 0.75kV; 6 feet for voltages of over 0.75v to 50kV; 10 feet for voltages of over 50kV to 345kV; 16 feet for voltages of over 345kV to 750kV; and 20 feet for voltages over 750kV to 1,000kV.

Cranes, Hoists, Motor Vehicles, Elevators and Heavy Equipment (continued)

7. A designated employee must observe clearance of the equipment and give timely warning for all operations where the operator's vision is obstructed.
8. Any overhead line must be considered energized unless the utility owner/operator confirms that the power line has been and continues to be de energized and the line is visibly grounded at the worksite.

Motor Vehicle and Heavy Equipment

1. The parking brake must be set whenever the vehicle is parked. Equipment parked on an incline must have the wheels chocked.
2. Where provided, seat belts must be used.
3. Do not ride in the bed of a truck containing materials, which are not properly secured to prevent movement.
4. You are not permitted to ride on loads, fenders, running boards or tailgates, or allow your legs or arms to dangle over the sides.
5. Drivers must not move vehicles until riders comply with all safety precautions.
6. Do not back up any vehicle or equipment when the view to the rear is obstructed unless:
 - It is equipped with an operating back-up alarm, which is audible above the surrounding noise for a distance of 200 feet or
 - Observer signals that it is safe to back up.

Personnel Hoists

1. The erection and operation of personnel hoists must conform to established standards.
2. Prior to placing hoists into service, functions and safety devices must be tested thoroughly under the supervision of a qualified person.
3. A sign stating "No Riders Allowed" must be posted on the car frame and at each landing. You are prohibited from riding material hoists except for authorized purposes of inspection and maintenance.

Crane Suspended Work Platforms

1. Crane suspended work platforms are to be used only when no other practical means of doing the job exists.
2. Workers occupying the personnel platform must be provided and use a personal fall arrest system.
3. Crane suspended work platforms shall be designed and approved by a registered professional engineer and tested prior to use.
4. The hoisting equipment shall be power operated in both up and down directions.
5. A crane suspended work platform permit shall be utilized according to pertinent federal, state, or other regulatory requirements.
6. A trial lift with the unoccupied personnel platform loaded at least to the anticipated lift weight must be made from ground level, or any other location where employees will enter the platform, to each location at which the platform is to be hoisted and positioned.
7. At each jobsite, prior to hoisting employees on the personnel platform, and after any repair or modification, the platform and rigging must be proof tested to 125 percent of the platform's rated capacity. The proof test may be done concurrently with the trial lift.

Cranes, Hoists, Motor Vehicles, Elevators and Heavy Equipment (continued)

Ladders

Where ladders are used to provide access to work areas, the following rules shall apply:

1. Job-made ladders must be constructed to conform to the established standards.
2. Broken or damaged ladders must not be used.
3. Straight ladders must be tied off at the top.
4. Ladders should not be placed against a moveable object.
5. The base of the ladder must be set back a safe distance from the vertical, approximately one-fourth of the working length of the ladder.
6. Rails of ladders used for access to a floor or platform must extend at least 3 feet above the landing with no rungs above the landing.
7. The areas around the top and base of ladders must be free of tripping hazards, such as loose materials or trash.
8. Protect ladders that project into passageways or doorways with barricades or guards. The ladders could otherwise be struck by personnel, moving equipment, or materials being handled.
9. Face the ladder at all times when ascending or descending.
10. Be sure that shoes are free of mud, grease, or other substances, which could cause a slip or fall.

Excavation and Trenches

A cave-in can trap you within seconds and kill you within minutes. Two cubic yards of soil weigh about 6,000 pounds. If you're buried, you'll suffocate in less than three minutes and if you do survive, the weight of the soil is likely to cause serious internal injuries.

Cave-ins aren't the only hazard in excavation work. Lack of oxygen, toxic fumes, explosive gases, and buried power lines may also be present. Unfortunately, many contractors who do excavation work still think that it's too expensive or takes too much time to provide appropriate safeguards.

Two cubic yards of soil weigh as much as a full size SUV – about 6,000 pounds!

The difference between an excavation and a trench

Dig a hole in the earth and you've made an excavation. Excavations can be wide, narrow, deep, or shallow. A trench is also an excavation but it is narrow and not more than 15 feet wide at the bottom. If forms or other structures are installed in an excavation that reduces its width to less than 15 feet, measured at the bottom, the excavation is also considered a trench.

If you work in an excavation more than 5 feet deep you must be protected from a cave-in.

Open-face excavation

A man-made cut, cavity, or depression in the earth's surface.

Trench

- Deeper than wide
- No more than 15 feet wide at the bottom

Excavation and Trenches (continued)

Open-face Trench

Forms or other structures installed in an excavation that reduce its width to less than 15 feet, measured at the bottom.

Plan before you dig

Planning reduces the chance that something will go wrong when you start the job. Consider the following before you start excavating:

- Surface debris near the excavation site that could create a hazard
- Weather conditions
- Stability of soil at the excavation site
- Location of underground utility lines
- Overhead power lines
- Vehicle traffic near the excavation site
- Stability of structures adjacent to the excavation site
- How employees will get in and out of the excavation
- Vehicles and other mobile equipment that will operate near the excavation
- Possibility of atmospheric hazards in the excavation
- Possibility of water accumulation in the excavation
- How to respond to emergencies
- How to protect people from falling into the excavation

Remember Jackie's Law: Per Massachusetts law, all unattended trenches must be covered, barricaded or backfilled.

Covers must be road plates at least $\frac{3}{4}$ " thick or equivalent; barricades must be fences at least 6' high with no openings greater than 4" between vertical supports; backfilling must be sufficient to eliminate the trench.

Confined Spaces

A confined space may be generally defined as any area, which has limited means of exit and is subject to oxygen deficient atmosphere or the accumulation of toxic or flammable gases or vapors. Example:

Tanks – Vats, boilers, bins – hoppers, silos, sewers, pits – deep trenches, telephone manholes, ventilation or exhaust ducts, sewer manholes and vaults.

1. DO NOT enter any confined space without knowing what is in it – what was in it and what precautions should be taken.
2. All confined spaces should be tested for poisonous gases and/or oxygen deficiency before entry.
3. Mechanical rescue/retrieval system, with life line should be utilized
4. Refer to Confined Space Entry Procedures Policy.

Underground Work

1. Be alert for loose soil or rocks or fractured material in all underground situations. Loose ground must be removed or properly supported.
2. All excavations over five feet deep must be adequately sloped or retained with suitable lagging, poling or casing. This depth must be reduced if less stable conditions are present.
3. Never work alone underground, in tunnels or shafts. There should always be at least two people within easy contact of each other in case of any emergency.
4. Be cautious in your work. Get help if you cannot correct any hazardous situation.
5. Portals for underground excavations must be protected and supported where there is loose rock, soil and fractured material.
6. Approved eye protection must be worn where there is danger from flying particles, hazardous substances, injurious light rays, sand blasting, cleaning with air or water, grouting, etc.
7. Approved rubber boots and rain gear must be worn where wet conditions are encountered.
8. Be alert for any accumulation of harmful fumes or lack of oxygen. Be sure that ventilation is adequate at all times.
9. Drilling underground without an adequate means of controlling the dust is prohibited.
10. Do not allow waste material to accumulate in work areas and passageways.
11. See that hoses, lines and cords are protected from damage by work operations or equipment.
12. Lighting must be adequate for underground work.
13. Be alert for moving equipment and be careful around loading and hauling equipment.

Fire Protection and Prevention

1. In case of fire:
 - Turn in an alarm at once and notify your supervisor.
 - Do not delay using an extinguisher.
 - Make sure the fire is completely out before leaving the area.
2. Familiarize yourself with the location of all fire fighting equipment in your work area.
3. Tampering with fire fighting equipment is grounds for dismissal.
4. Learn fire classifications:

Class A: Ordinary combustible materials such as wood, coal, paper or fabrics where wetting and cooling are the method of extinguishments.

Class B: Flammable petroleum products or other flammable liquids where oxygen must be removed for extinguishments.

Class C: Fires in or near energized electrical equipment where, because of use of water would be hazardous, a non-conducting “extinguishing agent” must be used.

5. Only approved solvents shall be used for cleaning and degreasing. The use of gasoline and similar flammable products for this purpose is prohibited.
6. Keep the work area neat. An orderly job site reduces the fire and accident hazard.
7. Where fire hazards are prevalent, get additional fire extinguishers and/or post a fire watch.
8. When you must weld or burn near combustible materials, move them, cover them with fire resistant fabric or wet them down. When in doubt, consult your supervisor.
9. Flammable and combustible liquids must be handled only in approved and properly labeled safety cans.
10. Place oily rags in approved covered metal containers.

Fire Protection and Prevention (continued)

11. Do not attempt any work involving a source of ignition near a pit, sewer, drain, manhole, trench or enclosed space where flammable gases may be present. Wait until tests have been made using an approved combustible gas indicator by authorized personnel, and the air has been declared safe for hot work.
12. Do not weld or cut on a tank or in an enclosure that has contained gasoline or other flammable gas or liquid unless it has been purged and tested by the safety department and proven to be safe.
13. The use of open fires is prohibited unless specifically authorized by the responsible supervisor.

Hazard Communication Plan

Windover Construction has a written Hazard Communication Program (HAZCOM) in compliance with OSHA Standard 1926.59. In accordance with the standard, the following items are available to all employees:

1. A copy of Windover Construction's written Hazard Communication Program
2. A copy of OSHA's Hazard Communication Standard.
3. A copy of Windover Construction's list of hazardous materials in the work place.
4. Copies of Material Safety Data Sheets for the hazardous materials to which an employee may be exposed.
5. Training in the safe use of hazardous materials.

Safe Load Rules of Thumb

These are not substitutes for accurate tables and reference materials but are useful in making a final safety check.

Chains

Safe load in tons is six (6) times the square of the diameter of chain stock. For example, when using $\frac{1}{2}$ " diameter chain stock; multiply $\frac{1}{2} \times \frac{1}{2} \times 6 = 1 - \frac{1}{2}$ tons or 3,000 pounds maximum safe load.

Manila Rope

Safe loads in tons equals diameter in inches squared (not accurate in sizes larger than one inch).

1" rope = 1×1 , or 1 ton safe load

$\frac{1}{2}$ " rope = $\frac{1}{2} \times \frac{1}{2}$ or $\frac{1}{4}$ ton safe load

For sisal rope, decrease safe loads by one third.

Open Eye Hook

Safe load in tons is diameter of eye in inches squared.

2" hook, $2 \times 2 = 4$ tons

Plow steel Cable

Safe load in tons is eight (8) times the diameter in inches squared.

$\frac{1}{2}$ " rope = $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4} \times 8 = 2$ tons

Shackle

Safe load in tons is diameter of pin in one fourth inches ($\frac{1}{4}$ ") squared and divided by three (3).

$\frac{1}{2}$ " diameter = 2 quarters

$2 \times 2 = 1 \frac{1}{3}$ tons or 2,667 pounds.

Crane Signals

In each of the following situations, a signal person must be provided:

- When the point of operation, meaning the path the load travels or the area where the load is placed, is not in full view of the operator.
- When the equipment is traveling and the operator's view in the direction of travel is obstructed.
- When, due to site-specific safety concerns, either the operator or the person handling the load determines that it is necessary.

Each signal person must meet the following qualification requirements:

- Know and understand the type of signals used. If hand signals are used, the signal person must know and understand the Standard Method for hand signals.
- Be competent in the application of the type of signals used.
- Have a basic understanding of equipment operation and limitations, including the crane dynamics involved in swinging and stopping loads and boom deflection from hoisting loads.
- Know and understand the relevant requirements of the sections of the standard dealing with signals.
- Demonstrate that he/she meets these requirements through an oral or written test, and through a practical test.

Crane Hand Signals:

HOIST With forearm vertical, forefinger pointing up, move hand in small horizontal circles.	LOWER With arm extended downward, forefinger pointing down, move hand in small horizontal circles.	USE MAIN HOIST Tap fist on head; then use regular signals.	SWING Arm extended point with finger in direction of swing of boom.	STOP Arm extended, palm down, move arm back and forth horizontally.	EMERGENCY STOP Both arms extended, palms down, move arms back and forth horizontally.
USE WHIPLINE (Auxiliary Hoist) Tap elbow with one hand; then use regular signals.	RAISE BOOM Arm extended, fingers closed, thumb pointing upward.	LOWER BOOM Arm extended, fingers closed, thumb pointing downward.	TRAVEL Arm extended forward, hand open and slightly raised, make pushing motion in direction of travel.	DOG EVERYTHING Clasp hands in front of body.	TRAVEL (BOTH TRACKS) Use both fists in front of body, making a circular motion about each other, indicating direction of travel, forward or backward. (For land crane only)
MOVE SLOWLY Use one hand to give any motion signal and place other hand motionless in front of hand giving the motion signal. (Hoist slowly shown in example.)	RAISE THE BOOM AND LOWER THE LOAD With arm extended, thumb pointing up, flex fingers in and out as long as load movement is desired.	LOWER THE BOOM AND RAISE THE LOAD With arm extended, thumb pointing down, flex fingers in and out as long as load movement is desired.	TRAVEL (ONE TRACK) Lock the track on side indicated by raised fist. Travel opposite track in direction indicated by circular motion of other fist, rotated vertically in front of body (For land cranes only).	EXTEND BOOM (TELESCOPING BOOMS) Both fists in front of body with thumbs pointing outward.	RETRACT BOOM (TELESCOPING BOOMS) Both fists in front of body with thumbs pointing toward each other.

Fall Protection

- Determine if walking surfaces have the strength and structural integrity to support you safely.
- Each walking/working surface with an unprotected edge 6' or more above a lower level must be protected by a guardrail system, safety net system or personal fall arrest system.
- A fall arrest system consists of an anchorage, connectors, body harness and may include a lanyard, deceleration device, lifeline, or suitable combination of these.
- Employees must be protected from holes or skylights in roofs.
- On leading edge work, pre-cast concrete erection and residential construction that an employer determines cannot use conventional fall protection systems. Employer has the option to develop a site specific fall protection plan.
- Floor openings must be covered or protected.

All other covers shall be capable of supporting, without failure, at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time.

All covers shall be secured when installed so as to prevent accidental displacement by the wind, equipment, or employees.

All covers shall be color coded or they shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard.

Slips and falls will be eliminated by good housekeeping and proper material storage.

Residential Fall Protection

With the issuance of the new directive, all residential construction employers must comply with 29 CFR 1926.501(b)(13).

Residential construction employers generally must ensure that employees working six feet or more above lower levels use guardrails, safety nets, or personal fall arrest systems. A personal fall arrest system may consist of a full body harness, a deceleration device, a lanyard, and an anchor point. (See the definition of "personal fall arrest system" in 29 CFR 1926.500).

Other fall protection measures may be used to the extent allowed under other provisions of 29 CFR 1926.501(b) addressing specific types of work. For example, 1926.501(b)(10) permits the use of warning lines and safety monitoring systems during the performance of roofing work on low-sloped roofs.

OSHA allows the use of an effective fall restraint system in lieu of a personal fall arrest system. To be effective, a fall restraint system must be rigged to prevent a worker from reaching a fall hazard and falling over the edge. A fall restraint system may consist of a full body harness or body belt that is connected to an anchor point at the center of a roof by a lanyard of a length that will not allow a worker to physically reach the edge of the roof.

Fall Protection (continued)

If the employer can demonstrate that use of conventional fall protection methods is infeasible or creates a greater hazard, it must ensure that a qualified person:

- Creates a written, site-specific fall protection plan in compliance with 29 CFR 1926.502(k); and
- Documents, in that plan, the reasons why conventional fall protection systems are infeasible or why their use would create a greater hazard.

The new directive interprets “residential construction” as construction work that satisfies both of the following elements:

- The end-use of the structure being built must be as a home, i.e., a dwelling.
- The structure being built must be constructed using traditional wood frame construction materials and methods. The limited use of structural steel in a predominantly wood-framed home, such as a steel I-beam to help support wood framing, does not disqualify a structure from being considered residential construction.

Traditional wood frame construction materials and methods will be characterized by:

- Framing materials: Wood (or equivalent cold-formed sheet metal stud) framing, not steel or concrete; wooden floor joists and roof structures.
- Exterior wall structure: Wood (or equivalent cold-formed sheet metal stud) framing or masonry brick or block.
- Methods: Traditional wood frame construction techniques.

Affirmative Action: EEO Policy Statement

Windover Construction will not discriminate against any employee or applicant for employment on the basis of race, color, religion, sex, age, national origin, physical or mental handicaps or because he or she is a disabled veteran in regard to any position for which the employee is qualified.

This policy shall apply to all Windover Construction's employment, training and promotional activities including but not limited to employment, placement, upgrading, demotion, transfer, layoff, recall, termination, rates of pay or other forms of compensation, selection for training, the use of Windover Construction facilities, and participation in all Windover Construction sponsored employee activities.

This policy shall periodically be brought to the attention of all supervisory personnel and shall be administered with a positive attitude. It is the responsibility of each supervisor of Windover Construction to ensure affirmative implementation of this policy. Please report any situation that is in violation to the above state policy to Windover Construction EEO Officer.

Disciplinary Policy

The safety rules, procedures and programs to which you have been trained are a requirement and condition of employment at Windover Construction. To help ensure your safety, the safety of other employees, and the safety of the residents, the following Progressive Disciplinary Action Program has been established:

1st Violation: Verbal Warning, with documentation from the supervisor.

2nd Violation: Written Warning, signed by you and your supervisor, to be placed in your permanent record.

3rd Violation: Up to two weeks suspension without pay, with documentation made to your permanent record.

4th Violation: Grounds for termination, if four violations occur within one year's time.

This progressive disciplinary policy does not apply for violations that are considered to be an extreme threat to the safety and well-being of employees and this facility. Any action that is deemed as willful intent to cause employee injury or property damage will result in immediate termination.

I fully understand the terms and conditions of this Progressive Disciplinary Program, and the action that will be taken for violations of Windover Construction safety procedures or creating a hazardous situation.

Employee signature: _____ Date: _____

Counseling Statement (See next page)

Disciplinary Policy

Counseling Statement

FROM:

DATE:

EMPLOYEE:

POSITION:

1. I have made the following observations of the employee's conduct:

2. I have informed the employee of the following standards that will be expected of him/her in the future:

3. These standards are important because of the following impact on the work environment:

4. I have advised the employee of the following consequences if he fails to follow the above standard:

5. These matters will be reviewed in _____ days.

Supervisor signature: _____ Date: _____

I have read and received a copy of the above statement. If I choose to, I can submit written comment about the above matters.

I Agree: _____ Date: _____

I Disagree: _____ Date: _____

Witness _____ Date: _____

Accident Prevention Policy

Windover Construction considers the prevention of accidents an integral part of operations. We are vitally concerned about the human suffering and financial losses resulting from on-the-job accidents, both for the individual and Windover Construction. Therefore, the prevention of accidents is a major objective of Windover Construction. Only the active sincere cooperation of all employees will ensure successful achievement of this goal.

Safe working conditions are primarily a management responsibility; accident prevention can be accomplished only through the coordinated effort of all employees. Therefore, all Windover Construction personnel are expected to be familiar with these written safety guidelines. No job or service performed by an employee is so important or urgent that it cannot be performed in a safe manner. It is our policy to provide safe and sanitary conditions.

We welcome and encourage suggestions from employees to help provide a safe work environment.

Accident Investigation

Thousands of accidents occur throughout the United States every day. Most are caused by failure of people, equipment, or environment. Accidents are investigated to determine how and why these failures occurred. By using information found during an investigation, a similar or perhaps more serious accident may be prevented. Accident investigations are targeted towards accident prevention, and they are not conducted to place blame.

Depending on the nature of the business, additional training may be required for the purpose of an accident and incident investigation.

1. Accident investigation has one primary goal—to prevent future accidents.
2. All accidents resulting in an injury or any accident with the potential to have caused injury should be investigated.
3. The primary objective is to find out exactly and completely how and why the accident happened.
4. The secondary objective is based on the facts to establish what could have been done to prevent the accident and what can be done to prevent a reoccurrence.

A good accident investigation:

1. Includes an investigation to get the facts.
2. Includes identification of the hazards or exposures involved.
3. Includes identification of the causes involved without placing blame.
4. Includes developing a plan of action that consists of physical and administrative controls.
5. Includes presenting the plan to management.
6. Includes follow through.
7. Should be conducted as soon as possible after the accident has occurred at the site where the accident took place.
8. Makes sure samples are taken of any chemicals, spills, vapors, etc. that may have been involved in the accident.
9. Includes photographs or sketches of the accident scene.
10. Identifies the people involved in the accident.

Accident Investigation (continued)

Interview witnesses separately and as soon as possible after the accident. Interview all witnesses who:

1. Saw the event leading up to the accident.
2. Saw the accident occur.
3. Arrived at the scene immediately after it occurred.

When conducting the interview:

1. Interview for facts, not fault.
2. Ask non-leading questions.
3. Test the information.
4. Beware of "smoke screens."
5. Interview privately.
6. Get complete information about injured person and the accident, including all machines/equipment involved and the job that the employee was performing.
7. Describe where the accident took place including all environmental conditions at the time of the accident.
8. Present the information and documentation to management so that corrective actions can be taken to prevent a reoccurrence.

All accidents must be investigated for responsible conditions contributing to the accident. Accident investigations are to be completed by the immediate supervisor responsible for the job area in which the accident occurred. Accident investigations must be thorough, taking into consideration all possible variables such as past training (or lack thereof), weather conditions at the time of the accident, type and adequacy of equipment for the activity being conducted, etc. Any witnesses to the accident should be interviewed to assist you in gaining a total picture of what happened. Obviously, the extent of injury and/or damage resulting from the accident should act as a guide to you as to how extensive an investigation should take place.

Notification of Employee's/Victim's of Work Accidents Relations

It is important to be prompt in notifying an accident victim's family in the proper manner. This should be done by a member of management who is schooled in the handling of such situations.

The speed with which you let an employee's family know of an injury, and the manner in which you handle the situation, can do a great deal to ease the pain, give the family strength to face the crises, and provide them with some reassurance at a time when they may need it most. Word of how you treat the family of an employee in an emergency will spread rapidly among other employees and their families.

Following is a check list to use in employee injury/death situations:

1. Appoint an upper management person to notify next of kin.
2. Determine the extent of the injuries.
3. Determine where the victim was taken.
4. Dispatch a member of management to the victim's home as soon as it is known where the victim was taken.

Upon arrival at the victim's home and informing the family, management should obtain any available updates on the victim's condition. Then, depending on the victim's condition, transport relatives to the hospital, find child care if needed, and assist with phone calls if the relative wishes.

1. Determine family doctor and clergyman.
2. In the case of a fatality, management should assist in handling arrangements. This may include travel for parents, providing food for the family, and assisting with the funeral plans if desired.
3. Offer to remain at the victim's home until other family members or friends arrive.
4. Encourage spouse, parents, and friends, to refer all press calls to the designated Windover Construction person.

In addition to being the thoughtful and decent approach to such matters, the few dollars this assistance to the victim's family may cost will be returned many times over in good will. The biggest mistake a Project Superintendent can make in time of an emergency situation is to be unprepared. In an emergency, a project superintendent should plan on news media representatives showing up on the scene with a thirst for information, BE PREPARED!

For example, the media will want to know:

1. What fell down or blew up?
2. Was anyone hurt?
3. Why did it happen?
4. How is the community or neighborhood being affected?
5. What are you (Windover Construction) doing to fix it?

Notification of Employee's/Victim's of Work Accidents Relations (continued)

Rule 1: Know Windover Construction Policy

1. Avoid use of certain words when talking with news media representatives. Use words such as “a structural problem” rather than “collapse of staging” or “line break” instead of “explosion.” Avoid words such as “disaster” or “catastrophe.” It is better to use “incident” or “accident.”
2. Avoid discussing legal questions. Your questioner may not be aware of the tricky and hugely expensive legal problems you can bring about through inadvertent remarks. All questions of liability, negligence, and/or “at fault” should be left to others. Avoid speculation as to the cause of the accident, amount of damage, and responsibility. Be sure of your facts when you give them. No guesses or speculation. If you have to back up and correct yourself later, your credibility, and the credibility of Windover Construction, will be severely affected.
3. Avoid giving personal opinions. You are Windover Construction. Even if you qualify your comments saying they are personal views, they will be perceived as the views, and the policy, of Windover Construction.
4. Never release names of victims until it’s certain that families involved have been notified. A Windover Construction officer should personally talk to next of kin before names are released.
5. Always accentuate the positive. If your public relations efforts are good, so are Windover Construction’s chances for fair treatment from the media.

Rule 2: Know the Media

1. Media representatives are professional, just as you are. Treat them with professional courtesy and respect, and they are likely to return the favor.
2. Never patronize a reporter (i.e., calling her “honey,” etc.) If you insult a reporter, the insult may be answered on the air or in print. You and Windover Construction will lose! Never lie and do not make jokes.
3. Speak simply and plainly. The media will be trying very hard to understand what is going on. They will appreciate your efforts to help them. Try to keep track of which media representatives contact you. If possible, have an assistant or project clerk gather telephone numbers and names.
4. Never push the media away. Nothing so inspires a reporter’s lust for a story as being told to go away. If a reporter begins to get the idea you are hiding something, your dealings with them can become very difficult. At least suggest someone whom they can contact for information.
5. Never deal in hypothetical or what if stories. Simply point out that you cannot discuss something that has never happened.

Rule 3: Plan Ahead

1. Plan ahead for any encounter with the media, especially in a crisis. Brush up on the facts. Work out a brief statement telling what you know. Use notes.
2. Questions to expect are:
 - Number of deaths and/or injuries;
 - Damage;
 - Time;
 - Location;
 - Cause (officials should release this information only after appropriate studies and investigations are performed).

Notification of Employee's/Victim's of Work Accidents Relations (continued)

Rule 3: Plan Ahead (continued)

3. Know whom you are talking to and assume you are being recorded, whether on the phone or in person. Never talk "off the record" with a reporter. If you wouldn't say it on live television in front of three million people, don't say it to a professional journalist.
4. Tell what positive steps Windover Construction is taking. In an emergency, for example, be prepared to tell exactly what your crews are doing to clean up the problem. In a similar vein, it is a good idea to mention positive results from the actions Windover Construction has already taken to alleviate or remove any future problems from this site. Be quick to highlight successful safety records and any acts of heroism by employees during the crisis. Don't be afraid to say you don't know. If pressed, simply repeat that you just don't know.
5. If you don't know, don't guess. Especially when you are being asked about the cause of an accident or about injuries suffered in an accident. Simply state that the cause of the accident is being investigated by the appropriate individuals and the injured personnel are being treated at local medical facilities.

Rule 4: Take Control

1. Unless and until someone of higher authority arrives to handle official statements you are "it." The media needs you very badly as a source of facts and information. The important thing is that you do it your way.
2. Be helpful, to the extent you can. If the reporter requests information that you don't have, but you know you are authorized to release it, and then by all means help the reporter get it. Your helpfulness will reflect on Windover Construction at large.
3. Know how to politely decline an interview. One reason could be that you just do not have the time to talk. Another could be that there are others in Windover Construction who are more knowledgeable in the area being discussed. Once you have deferred an interview to, say, a vice president or director of communications, be firm. Don't back down.
4. Know how to buy time. You are entirely within your rights to ask for a few minutes to collect your thoughts. When a reporter calls on the telephone you may explain that you are tied up at the moment, promise to call back in a few minutes and use the time to plan. Then be sure to call back.
5. Note where the interview is taking place. A chemical plant spokesman in Texas was once asked to stand for an interview in a spot near the front gate. He refused to comply when he saw that directly behind him would be a Windover Construction monument to hundred of victims of a terrible explosion in 1945. You, too, can exercise your rights to be interviewed where you choose. Remember photo and video can be as harmful as or more harmful than words.
6. Know how to end an interview. Determine ahead of time, if you can, how much time the reporter(s) will need. After that period of time or when you realize the subject has been covered, you may simply stand up, look at your watch, and announce that you have to go now.

Conclusion:

1. You should realize that the press has a job to do, which is to get the story. They can get your story or someone else's opinion. Give them the facts as you know them to be correct. State the obvious. Stay within the stated guidelines and then excuse yourself so that you can do your job at the accident scene.
2. Remember:
 - Know Windover Construction policy on how to handle the media.
 - Know the media.
 - Plan ahead/be prepared.
 - Take control handling arrangements. This may include travel for parents, providing food for the family, and assisting with funeral plans if desired.

Alternative Duty and Return to Work Programs

RETURN-TO-WORK CHECKLIST

1. Prepare policy statement showing upper management commitment to the program.
2. Appoint program coordinator.
3. Educate middle management staff (supervisor, foreman, etc.)
4. Prepare job analysis, job modification, and employee training programs. Negotiate with the union if appropriate.
5. Inform physicians in the community of your expectations and of job availability (job analysis).
6. Prepare checklist for first week of injury, first aid, reporting, and contacts with employee, treating physicians, agent/broker, and insurance Windover Construction.
7. Establish means for subsequent communication with physicians to predetermine restrictions and date of return to work.
8. Establish means and goals for ongoing communication with employee.
9. Establish procedures for the day before and the day of return to work.
10. Evaluate the program.

Return to Work Policy Statement

It is Windover Construction policy to effectively implement a return-to-work program as a way to retain valued employees. Windover Construction cares about all employees and considers caring good business.

Mr./Mrs. _____ has been appointed to evaluate, plan, and develop procedures to monitor the implementation of this program. He/she has my complete support to coordinate all activities among personnel, safety and health, and production departments.

I believe that employees who return to modified duty work after an injury will feel more useful. No one likes to be ill or feel disabled, and modified duty work promotes the positive emotions that help heal. Modified duty programs will also allow people recovering from injuries to stay in touch with their fellow workers and what is happening in Windover Construction.

I am convinced that this program, in conjunction with our loss control program, will ensure that Windover Construction provides a safe place to work and that if an injury is suffered; we have the ability to help bring back our employees to full-time status.

Sincerely,

Date: _____

Alternative Duty and Return to Work Programs

Suggested Modified Duty Programs

- Have a written policy:
- Make sure everyone (employees, supervisors) understands how the program works and why you are doing it, e.g. to keep injured worker employed and productive.
- Have a weekly meeting with the employee to review progress, problems.
- Get the exact physical limitations from the doctor.
- Have the doctor approve modified duty job.
- Make sure the employee does not exceed physical restrictions. Supervisors must monitor this.
- Make sure everyone is aware that modified duty is a temporary situation, not a permanent job change.
- Begin modified duty in mid week rather than Monday morning.
- Therapy or treatment should continue during modified duty.
- Job should be customized and can be restructured frequently to allow increased capacity and reduced limitations.
- Do not select a job which is demeaning or demoralizing. Select jobs which are as similar as possible to the original job.
- Be creative in restructuring schedules and identifying non traditional jobs.

Medical Sample

Pre-Employment Medical Examination

As a condition of employment, applicants for employment may be required to pass a physical examination concerning their mental and physical fitness to perform safely and efficiently the jobs for which they have applied. This examination may include drug and/or alcohol screening. The examination will be administered by a physician designated by Windover Construction.

Transfer/Promotion Medical Examinations

Employees may be required to have a physical examination on other occasions, such as transfer or promotion, or whenever management determines that the interest of Windover Construction or the employee will be served thereby.

Confidentiality

Medical examinations paid for by Windover Construction are the property of Windover Construction, and any record thereof will be available to the employee, the employee's agent, public agencies, or the employee's doctor, only if required by law.

Alternative Duty and Return to Work Programs

Confirmation of Injury/Illness

Whenever an employee is absent because of illness or injury, Windover Construction may take whatever steps are reasonably necessary to confirm the nature and extent of such illness or injury. In the case of work related illnesses or injuries, Windover Construction may investigate the circumstances and otherwise verify whether the illness or injury was work related. Giving false information to obtain workers compensation will result in dismissal.

Payment for Medical Examinations

When Windover Construction requires an employee to be examined by a physician, the examination shall be at the expense of Windover Construction and performed by a physician selected by Windover Construction.

Reporting On-the-Job Injuries

Employees who become ill on the job or suffer any work related injury, no matter how minor, and any other employee who observes such illness or injury shall immediately report the incident to the employee's supervisor, who shall report it to the manager and the safety officer. Employees must notify their supervisor before leaving their work station for medical reasons.

Transportation to Medical Facility

Windover Construction will arrange transportation of the injured employee to Windover Construction physician, if it appears necessary. In the event an employee is seriously injured, his immediate supervisor, the safety officer, or any other member of management has the authority to have the injured employee transferred to an outside medical facility for treatment.

Employee Responsibilities

In the event of a work related injury, the employee must:

1. Complete the required workers compensation and department reports in a timely manner.
2. Be available for medical appointments during normal working hours.
3. Keep appointments with medical providers.
4. Return to work as soon as he/she is certified to do so by Windover Construction physician.

Return to Work

An employee who fails to return to work at the end of an approved medical absence may be disciplined up to and including dismissal from employment.

Return to Work Certification

Employees returning from a medical absence leave may be required to provide certification from a physician designated by Windover Construction certifying their ability to perform safely and satisfactorily their regular work without endangering themselves or their fellow employees.

Modified Duty

Windover Construction may offer employees who have been injured on-the-job modified duty on an interim basis. In the event Windover Construction elects to offer the employee modified duty, the employee must report for work at the time specified if Windover Construction physician releases the employee to return to work in the modified position. Any employee who refuses to return to modified duty will be subject to discipline up to and including dismissal.

Alternative Duty and Return to Work Programs

Form Letter To Treating Physician

(Date)

(Doctor)
(Address)

Dear :

Currently you are treating one of our employees, _____ for an injury he/she may have received at work on _____. Our desire is to have _____ return to work in any appropriate capacity, as soon as possible.

We have available a number of temporary modified duty functions. They have been designed to assist injured employees in their expeditious return to full employment. With your assistance, we would like to enroll _____ in our modified duty program and return him/her to full employment as soon as possible under your supervision.

Enclosed is our standard Employee Modification Form. Please complete the form and return a copy to me. At the bottom of the form, kindly indicate if the restrictions you cite are to be permanent or temporary. If temporary, I would appreciate it if you would estimate their duration.

To assist you in your diagnosis and treatment, I am enclosing copies of our own physician's analysis of the injury. Please feel free to communicate directly with _____ regarding patient disposition.

I would be happy to answer any questions you may have about our modified duty program or to show you some of our modified work functions, if you would care to visit us.

Thank you for your prompt attention in considering the release of _____ for modified duty work.

Sincerely,

Signature

Alternative Duty and Return to Work Programs

Employee Modification Report

	Continuously	Frequently	Occasionally	Never
Carrying 10 pounds				
Carrying 20 pounds				
Carrying 50 pounds				
Carrying 100 pounds				
Bend				
Climb				
Crawl				
Squat				
Reach about shoulder level				

Repetitive Movement of Hands

	Simple Grasping		Pushing/Pulling		Fine Manipulation	
Right	Yes	No	Yes	No	Yes	No
Left	Yes	No	Yes	No	Yes	No

Repetitive Movement of Feet

Right	Yes	No
Left	Yes	No

Listen	Yes	No
Talk	Yes	No

What type of activities can the patient perform at home, and which of those could be performed at work (in a modified duty position?)

	Home	Duration	Modified Duty	Duration
Walking				
Standing				
Sitting				
Lifting				
Bending				
Climbing				
Stooping				
Driving				
Answering Phone				

Alternative Duty and Return to Work Programs

Employee Modification Report

When may this employee return to a modified duty position?

Note: Upon request we can provide a description of the modified duty position for your approval.

Is physical rehabilitation/follow-up treatment required? _____

Note: We will allow the employee to leave work for treatment.

Please describe:

Alternative Duty and Return to Work Programs

Employee Modification Report

Follow up appointment on: _____ Time: _____

POST INJURY RESPONSE

Physician's Name: _____

Appointment Date: __/__/__

Employee: _____

Date of Accident: __/__/__

A note to the physician:

Our organization is committed to the safety and well being of our employees and the continuity of employment. Recently, we incorporated an injury management program in conjunction with our safety prevention activities. We would greatly appreciate you noting any modifications and duration thereof on the form below. We take our responsibility as a concerned employer very seriously, and we need this information to help this employee.

If you have any questions regarding the employee in our program, please call _____ at _____.

In an eight-hour day, this patient can (please circle):

	Hours								Continuously	With Rests	Unable
Sit	1	2	3	4	5	6	7	8			
Stand	1	2	3	4	5	6	7	8			
Walk	1	2	3	4	5	6	7	8			

Lifting	Continuously	Frequently	Occasionally	Never
10 pounds				
20 pounds				
50 pounds				
100 pounds				

Alternative Duty and Return to Work Programs

Employee Modification Report

EMPLOYEE LETTER OFFERING MODIFIED DUTY

Certified Mail - Return Receipt Requested

Date

Dear _____,

Your doctor, _____, has told us that you are able to do a modified duty job at Windover Construction that fits within your medical limitations. A copy of your limitations is attached to this letter.

We have a position for you which fits within all these medical limitations and we would like you to return to work at this modified duty job on _____.

The job is: _____.

We hope you will return to work in this modified job until you can return to your original job full time. This modified duty job is only a temporary position until you can go back to your old position.

Please sign your name on the line below indicating whether you accept or reject this offer to return to work. Please return this letter to me in the self addressed stamped envelope that is enclosed within five days.

Sincerely,

Personnel Manager's Signature

I accept the job _____ Date _____

I do not accept the job _____ Date _____

cc: Insurance Windover Construction

OSHA Visit Protocol

Several events can prompt an OSHA inspection of a facility.

Employee Complaints. An employee complaint will usually bring OSHA to the door, although the agency may sometimes inquire informally by letter first. OSHA receives complaints confidentially and will not disclose the identity of a complainant in most circumstances.

It is a violation of law for an employer to retaliate against an employee who files a complaint, even a frivolous one. For example, an employer who fires such an employee may be subject to a lawsuit by OSHA and could be ordered to pay punitive damages and to reinstate the worker with back wages and benefits. Other forms of retaliation, such as demotion or harassment, can also bring an OSHA lawsuit and expose an employer to civil penalties.

Serious Workplace Incidents. Deaths or serious injuries must be reported to OSHA and will also trigger inspections. Fatalities, catastrophes (where 3 or more workers are hospitalized as a result of a single event) must be reported within 8 hours of an incident by calling OSHA at 1-800-321-OSHA or the agency's area office. If no one answers at the area office, then you must call the 1-800-321-OSHA number.

General Scheduled Inspections. OSHA conducts random or routine inspections from time to time. Targeted Inspections. With OSHA's new targeting program, an inspection of targeted employers is guaranteed unless an employer enters into a cooperative compliance program with OSHA.

The agency has targeted facilities with high lost-workday incidence rates attributable to workplace injury or illness and those with histories of noncompliance. Affected employers should have received letters from OSHA in December 1997 advising them that they are on the target list and inviting them to enter into a voluntary compliance program with the agency. Some of those participating in the voluntary compliance program may not be inspected; others will be.

Must an Inspector Have an Inspection Warrant? OSHA inspectors are empowered to obtain an inspection warrant if a facility does not voluntarily admit an inspector. An inspector is likely to obtain a warrant even before appearing at an employer's door if the examiner believes that a facility will oppose the inspection. In any case, a company has a right to require that an inspector have a warrant and may refuse entry if it has reason to believe a warrant is not valid.

The employer has the option to consent to an inspection without a warrant, to require a warrant, or to test the validity of a warrant in court before permitting an inspection. This decision should be made with assistance of legal counsel.

How Is an Inspection Conducted? It is important to understand how an inspection is performed and an employer's rights during such a visit. Specific phases of an inspection unfold from the time an inspector arrives until he or she departs.

The Opening Conference. Before an actual inspection begins, the OSHA inspector should meet with the employer's representatives to explain the purpose and reason for the visit (e.g., triggered by a complaint, a fatality, catastrophe). If the company is participating in an OSHA compliance program or has received an inspection exemption from OSHA, it should immediately inform the inspector of that fact at the opening conference. The company representative should ascertain precisely the scope of the inspection and ask for a copy of the OSHA standards that will apply to the inspection. If an inspection is related to an employee complaint, the company should request a copy of the complaint. Although the complaining employee's identity may be withheld, the employer is entitled to know the subject matter of the complaint. The employee's name can be blacked out to preserve anonymity.

It is important to have the inspector define and explain the reasons for scrutinizing specific areas and the specific health and safety considerations at issue. These elements define the focus of the inspection.

OSHA Visit Protocol

The Walkabout. At the conclusion of the opening conference, the inspector proceeds to check the premises for safety and health violations. Company representatives should not volunteer information that is not requested. The inspector will determine where the inspection begins and how long it lasts. Nevertheless, one or more company representatives should remain with the inspector at all times.

In a union shop, the union's bargaining agent may also designate a representative (typically a union steward) to accompany the inspector. Otherwise, the inspector may identify a non-management employee representative or may choose to talk privately with various employees during the inspection tour.

In any case, management may not select a non-management employee representative for the walkabout or attempt to influence an inspector's selection of employees. However, the inspector should limit employee consultations to a reasonable number and should not unduly interfere with their work.

If an inspection appears to be expanding in scope beyond what was defined in the opening conference, company representatives should not hesitate to point that out and question the change in plans.

Depending to a certain extent on an inspection's scope and purpose, an inspector's intention is to evaluate the facility's safety and health conditions and procedures against general OSHA regulations, as well as standards that specifically apply to the industry.

An inspector may take photographs, instrument readings, air samples, spill samples, and other measurements. If so, a company representative should take duplicate photos and samples and record the same readings and measurements for later comparison, if necessary.

If an inspector points out a violation that can be corrected immediately, that correction should be made. The inspector may still issue a citation, but immediate abatement demonstrates good faith and may lower the penalty that would otherwise be assessed for the violation.

Finally, if an inspector is unduly hostile, abusive, or intrusive beyond the initially defined scope of the inspection—especially if the inspector attempts to exceed the parameters specifically set forth in a warrant—an employer should immediately consult with legal counsel about requesting that the inspection be adjourned pending a meeting with the area director or for other possible legal action before the walkabout continues. In any case, company representatives should not respond to an inspector in a hostile manner—they should maintain a professional, matter-of-fact demeanor.

Examination of Records. The inspector examines a company's record keeping to ensure compliance with OSHA regulations. These include incident records of injuries, illnesses, fatalities, and exposures to any toxic or hazardous substances. The inspector will ask for verification that a copy of OSHA's form 300 summary has been posted, as well as the required OSHA health and safety poster. The inspector will also examine the company's training records, hazard communications (HAZCOM) program, and material safety data sheets (MSDSs).

The Closing Conference. After the inspection, the inspector will confer with the employer and employee representatives. The company representative should ask the inspector to explain problems and needs that were identified during the walkabout. This provides an opportunity to ask questions about corrective action (abatement) and anticipated citations and penalties.

OSHA Visit Protocol

An inspector is highly unlikely to disclose specific penalties, but he or she should explain those deficiencies that were observed during the inspection and the employer's rights to appeal any adverse findings and penalties. The inspector should provide the employer with a copy of OSHA publication 3000, which explains employer rights and responsibilities following an OSHA inspection. The inspector will file a report with the area director, who determines whether to issue citations and assess penalties.

Are Trade Secrets Protected in an OSHA Inspection? Inspectors are prohibited by law from disclosing a company's trade secrets and proprietary information. An inspector who violates this law can be subject to criminal prosecution, fines, and imprisonment. This is one reason for accompanying an inspector during the walkabout. Company representatives should identify proprietary processes, formulae, and other trade secrets that an inspector observes so that he is aware of the confidential nature of the information.

A particularly sensitive issue arises when an inspector wants to take a photograph in which a trade secret may appear. However, the inspector may agree not to take the photo or to shoot it in such a way that the resulting image would be useless to a competitor.

What Are the Potential Penalties?

A range of potential citations and penalties is possible for violations identified during an OSHA inspection. The area director has some discretion in determining the nature of and the penalty for a violation. Citation categories and associated penalties include:

1. De minimus, penalties unlikely.
2. Other-than-serious, \$1,000 to \$7,000.
3. Serious, \$1,500 to \$7,000.
4. Posting, up to \$7,000.
5. Willful, \$5,000 to \$70,000.
6. Criminal willful (determined after a finding of guilt in a criminal proceeding), up to six months' imprisonment and a \$250,000 fine for an individual or a \$500,000 fine if the employer is a corporation (for a first violation).
7. Repeated (determined in a follow-up inspection), up to \$70,000.
8. Failure to abate, up to \$7,000 per day.
9. Record keeping, typically an "other-than-serious" finding unless it involves falsification of records, which carries a potential six-month imprisonment and a fine of up to \$10,000.
10. Assaulting, interfering with, or resisting an inspector in the performance of his or her duties, imprisonment for up to three years and a fine of up to \$5,000.

Can a Company Effectively Prepare for an Inspection? Effective preparation is an ongoing process that requires knowledge of applicable OSHA regulations and vigilant attention to self-inspection and record keeping. Here are some keys to survival:

OSHA Expert. A company should designate a management-level individual to be its in-house OSHA expert. This person should attend seminars—many are offered free of charge by OSHA and state agencies—and should have time to devote to the job. Many employers running on tight budgets understandably but mistakenly give the OSHA hat to a manager who is already fully occupied with other duties. This is not effective and is likely to give short shrift to OSHA issues.

Dealing with OSHA issues may or may not be a full-time job, depending on the size of the facility and number of sites. Larger facilities should have a full-time OSHA manager who is assisted by others. Smaller facilities may require only one person to devote full- or part-time attention to the subject.

OSHA Visit Protocol

In any case, the person responsible for OSHA compliance must have the knowledge and the time to implement OSHA compliance measures effectively with respect to the physical plant, operations, record keeping, and training. The OSHA officer must also be empowered by management to enforce the agency's compliance measures.

In addition, a company should communicate to its work force that observance of OSHA requirements is important. Postings, written policies, regularly scheduled safety meetings for managers and line supervisors, and training that involve all employees' help to convey such a commitment.

Training. OSHA requires appropriate periodic safety training for all categories of employees, including office and other white-collar workers, as well as manufacturing and production employees. The training must be designed to educate employees on OSHA safety and health issues relevant to the jobs they perform and the equipment they use.

Training must be documented. Sign-up sheets should state the training topic, place, and date and should bear each attendee's printed name and signature. Employees who miss such meetings should be required to attend makeup sessions. Training record files should be maintained for an OSHA inspector's review. The files should contain copies of any handouts, charts, photos, videos, etc., that document the substance of the training.

If proper training is conducted, no employee can claim ignorance as an excuse for failing to maintain a work area in a safe manner. Likewise, supervisors should be held accountable for ensuring that safety devices on equipment are in place and operative and that employees wear required personal protective clothing or equipment. Employees who refuse to comply should be disciplined and required to undergo more training.

HAZCOM Program. Every employer is required to maintain on-site MSDS records for each potentially hazardous chemical or compound kept or used on the premises. These can range from industrial chemicals such as acids used in production processes to cleaning fluids and such seemingly innocuous substances as paper white-out fluids routinely used in offices.

HAZCOM training is required by OSHA to acquaint employees to the presence of hazardous substances, their safe usage and proper storage, and the locations of MSDS books and first aid kits. MSDS records should be accompanied by a narrative called "The Hazards Communications Program." The written HAZCOM program and MSDSs must be readily accessible to employees.

Self-Inspection. Unannounced in-house inspections should be conducted periodically, and deficiencies should be noted and corrected.

Emergency Action Plan

This model Emergency Action Plan (EAP) serves as a guide only and must be revised to be worksite specific. For contractors, a generic written fire prevention program can be developed which include addendums that reference site-specific conditions and procedures. Programs should be in writing and available for access and review by employees.

Employers that have more than one work location may develop one comprehensive plan with addendums for each location to clarify site specific conditions and procedures to follow.

_____ is responsible for development and implementation of this plan and will be known as the Emergency Response Team Coordinator. (Typically the superintendent or site safety representative)

Emergency Escape Routes

It is the responsibility of _____ to see that emergency escape maps are developed, accurate, and posted. Emergency escape routes are posted at _____ (*location*)

Reporting Fires and Other Emergencies

In the event of an emergency that requires immediate evacuation the person discovering the emergency should:

Indicate method for alerting employees to an emergency (sounding air horn or siren, calling general voice alert on 911, other).

To contact outside emergency personnel help dial 911

Phones with a direct outside line are located at _____

Include here your company's procedure for summoning outside help.

Contact Persons

The Emergency Response Team Coordinator, or their designee, will be the contact person for emergency personnel that arrive on the scene. Each team leader (typically the foremen) will be responsible for assuring that all of their employees are accounted for. This will be done by having each team leader report ASAP to the emergency response team coordinator that all are present or who is missing. This information will be forwarded to emergency personnel on the scene.

Each Team Leader will be responsible for a maximum of 20 employees. Team Leaders at this site are:

Accounting for Employees

Employees should immediately evacuate and meet at _____. (*Indicate outside muster point which will not inhibit emergency personnel*) Each team leader will be responsible for accounting for all employees at the muster points. In the event that the team leader is out (or unaccountable), the emergency response team coordinator will be responsible for accounting for those trade employees.

Once it has been determined that all are present or who is missing this should be reported to the emergency response team coordinator.

Emergency Action Plan

Accounting for non employees visiting the site

Explain here your company's procedure for accounting for visitors. Guests, tours, and vendors, etc. should report to the general contractor's trailer where they should sign a visitor log. Signs should be posted to indicate this policy.

In the event of an evacuation _____ will bring the visitor log to the muster point.

Special Needs

Procedures should be developed to identify any special needs person on the site so that assistance can be provided if evacuation is necessary. Disabled persons may need to be assisted by employees.

Critical Operations

There are certain critical operations will need to be attended to prior to evacuation. (*Compile a list of critical operations and responsible persons.*)

Critical Operation	Responsible Person
1.	1.
2.	2.
3.	3.
4.	4.

Inside Safe Refuge Area

Emergency incidents may occur that do not require evacuation of the entire site or building such as severe weather, or outside chemical release. The safe refuge area at this site is _____.

Communication will be maintained via Means of Communication. (*indicate type of communication such as cell phone, walkie-talkie etc.*)

_____ (*name or job title*) will be responsible for bringing communication equipment to the safe refuge area along with emergency contact phone numbers. Portable radios and extra batteries will be kept Location. These will be brought to the safe refugee area by _____. (*name or job title*)

Evacuation Drills

Evacuation drills shall be conducted on an _____ basis. The frequency of the drills will depend on the potential hazards at the site, the phase of the project and the complexity of the site's layout.

It will be the responsibility of _____ to arrange with the local fire department for drills—if applicable. After each drill the employer, any designated employees, or the safety committee will meet to review the drill and determine where changes, if any, need to be made. Employees should provide input as to the effectiveness of the drill.

Emergency Action Plan

Personal Protective Equipment (PPE)

In some cases PPE may be needed to evacuate safely. This would be necessary if chemical release is possible.

List the types of PPE that is provided and should be worn. (e.g., goggles, respirators, etc.)

(1926.800 requires the ready availability of self-rescuers if employees are working underground. It will be the responsibility of _____ (*name or job title*) to regularly inspect the respirators)

Training

Training of employees on the proper procedures to follow in the event of an emergency will be conducted by _____. Training of employees will be done on their first day of work and annually.

Additional training will be provided when:

- New equipment, materials or processes are introduced;
- Layout or design of the site changes (this may be weekly, or more frequent, due to dynamics of construction sites);
- Employee's responsibilities or designated actions under the plan change;
- Drills demonstrate that employee performance must be improved.

Employee training includes:

- Review of emergency escape routes;
- Fire extinguisher training (if applicable);
- Means for reporting emergencies;
- Shut down procedures for critical operations;
- Alarm systems;
- Types of potential emergencies;
- Hazardous areas to avoid during an emergency incident;
- Procedures for disabled;
- Location of muster points;
- Personal protective equipment use (if applicable);
- Review of Emergency Action Plan.

Team leader (foreman) training includes:

- All of the employee training;
- Complete workplace layout;
- Alternate escape routes;
- Chemical/process hazards in the site.

Emergency Action Plan

Rescue and medical duties

Rescue and medical duties will be performed by the local fire department (or other-indicate). Provide a list of designated first aiders. They will assist until emergency medical personnel arrive on the scene.

This plan will be reviewed by _____ on an annual basis. If revisions are made, “reviewed and revised” and the date performed.

Reviewed by:	Date:

APPENDIX A: Checklists

Crane Inspection & Maintenance

A competent person must visually inspect the equipment each shift the equipment is used. Taking apart equipment components and booming down is not required as part of this inspection unless the results of the visual inspection or trial operation indicate that further investigation necessitating taking apart equipment components or booming down is needed. Shift inspections need not be documented. At a minimum the inspection must include all of the following:

- Control mechanisms for maladjustments interfering with proper operation.
- Control and drive mechanisms for apparent excessive wear of components and contamination by lubricants, water or other foreign matter.
- Air, hydraulic, and other pressurized lines for deterioration or leakage, particularly those which flex in normal operation.
- Hydraulic system for proper fluid level.
- Hooks and latches for deformation, cracks, excessive wear, or damage such as from chemicals or heat.
- Wire rope reeving for compliance with the manufacturer's specifications.
- Wire rope (see section 192.1413 for the rules for wire rope inspections).
- Electrical apparatus for malfunctioning, signs of apparent excessive deterioration, or dirt or moisture accumulation.
- Tires (when in use) for proper inflation and condition.
- Ground conditions around the equipment for proper support, including ground settling under and around outriggers/stabilizers and supporting foundations, ground water accumulation, or similar conditions.
- The equipment for level position within the tolerances specified by the equipment manufacturer's recommendations, both before each shift and after each move and setup.
- Operator cab windows for significant cracks, breaks, or other deficiencies that would hamper the operator's view.
- Rails, rail stops, rail clamps and supporting surfaces when the equipment travels on rails.
- Safety devices and operational aids for proper operation.
- For derricks, guys for proper tension (section 1926.1436(p)).
- Deficiencies identified during the most recent annual inspection that the inspector determined must be monitored in the monthly inspections.

MONTHLY INSPECTIONS: The monthly inspection is the same as a shift inspection for most equipment. The following information must be documented and maintained for a minimum of three months by the employer that conducts the inspection:

- The items checked and the results of the inspection.
- The name and signature of the person who conducted the inspection and the date.

ANNUAL/COMPREHENSIVE INSPECTIONS: The annual inspection must be conducted by a qualified person and is far more thorough than a shift or monthly inspection. The following information must be documented, maintained, and retained for a minimum of 12 months, by the employer that conducts the inspection:

- The items checked and the results of the inspection.
- The name and signature of the person who conducted the inspection and the date.

APPENDIX A: Checklists

Demolition

1. Prior to initiating demolition activities has a demolition plan and engineering asbestos, and lead surveys been completed by a Registered Professional Engineer?
2. Have all electric, gas, water, steam, sewer, and other service lines been shut off, capped or otherwise controlled outside the building line before demotion is started?
3. Has it been determined if any hazardous building materials, hazardous chemicals, gases, explosives, flammable materials, or hazardous substances have been used in any building construction, pipes, tanks, or other cause, have the floors and walls been shored or braced?
4. When employees work within a structure to be demolished which has been damaged by fire, flood, explosion, or other cause, have the floor and walls been shored or braced?
5. Has each story of exterior wall and floor been removed or dropped into the storage space below before commencing the removal of exterior walls and floors in the next story below?
6. Is everyone protected from the fragmentation of glass?
7. Have employee entrances to multistory structures being demolished been protected by sidewalk sheds, canopies, or both?
8. Is the designated means of access indicated on the demolition plan?
9. Are continuing inspections by a competent person being conducted during demolition to detect hazards resulting from weakened or deteriorated floors, walls or loosened material?
10. Are chute opening into which debris is dumped protected by a guardrail 42 inches above the floor or other surface on which personnel stand to dump the material?
11. Are signed warning of the hazard of failing materials posted at each side of the debris opening at each floor?
12. Has a competent person been assigned to control operation of the chute gate and the backing and loading of trucks?
13. Is the area surrounding the discharge end of the chute closed when operations are not in progress?
14. Are chutes designed and constructed of such strength so to eliminate failure due to impact of materials or debris loaded therein?
15. Do floor openings have curbs or stop-logs to prevent equipment from running over the edge?
16. Are masonry walls, or sections of masonry, prohibited from falling in such quantities as to exceed the safe carrying capacities of the floors?
17. Are employees prohibited from working on the top of a wall during hazardous weather?
18. Are floor openings within 10 feet of any wall being demolished planked solid except when employees are kept out of the area below?
19. Is debris and other material removed from floor arches and adjacent areas before demolishing?
20. Are safe walkways provided and used by personnel to enable them to reach any point without walking on exposed beams?
21. Do plank ends overlap by at least 1 foot when laid together over solid bearing?
22. Has planks been provided for workers razing steel framing?
23. Is steel construction dismantled column-by-column and tier-by-tier?
24. Are structural members being dismembered prohibited from overstressed?
25. Are all persons prohibited from being in areas affected by demolition when balling or clamping is being done?
26. Is the weight of the demotion ball within 50% of the crane's rated capacity at the operating configuration?
27. Is the ball attached to the load line with a swivel connection to prevent twisting and is it protected against accidental disconnection?
28. Are all roof cornices or other ornamental stonework removed prior to pulling walls over?

APPENDIX A: Checklists

FRAMING	
Fall Protection	
	Is fall protection used when exposed to 6' fall hazard?
	Are fall protection anchorage points installed properly?
	Is fall protection work plan available and implemented?
Ladders/Stairways	
	Stairway installed before 2nd floor studs raised?
	Guardrail and handrail on stairways with 4 or more risers?
	Ladders extend 3 ft beyond upper landing?
	Ladders used for purpose they were designed for?
	Top step or top of ladder used as step?
	Defective ladder marked and removed from service?
	Ladder/stairway safety training program implemented?
Guarding	
	Hand-held power circular saws properly guarded?
	Table saws properly guarded?
	Radial saws properly guarded?
	Power miter saws properly guarded?
	Pneumatic nailer/stapler have safety device on muzzle?
Structure Construction	
	Walls braced to prevent collapse?
	Scaffolds fully planked and guarded?
	Floor openings guarded (12" or more)?
	Wall openings guarded by standard railing or equivalent?
	Open sided surfaces guarded by standard railing or equivalent?
	Stair or ramp provided for break in elevation >19" ?
	Ramp used for access is at least 18" wide?
Personal Protective Equipment (PPE)	
	Individual hard hats available on site?
	Hard hats used when exposed to flying or falling objects?
	Eye protection worn?
	Suitable clothing -short sleeved shirt and long pants worn?
	Proper footwear worn?
	Is leg protection used during chainsaw usage?
Electrical	
	Extension cords with ground pin?
	Extension cords free of improper splices?
	Multi-outlet J-Box are waterproof?
	GFCI or assured grounding program?

APPENDIX A: Checklists

Related Program Requirements	
	<i>Is the APP tailored to the business and hazards involved?</i>
	Does the employer provide safety orientations?
	Is the APP outlined in written format?
	Is a Crew Leader-Crew Safety meeting held at beginning of job & weekly thereafter?
	Are safety meetings tailored to the operations?
	Are safety meetings documented?
	Are safety walk-around inspections conducted at the beginning of the job and weekly thereafter?
	Are walk-around inspections documented and available for inspection?
	Do employees work with hazardous chemicals/materials?
	Is there a hazard communication program that is written and implemented?
	Is there an Chemical Inventory for chemicals on-site?
	Is there an MSDS for each hazardous product?
	Are employees provided HAZCOM training?
First-Aid	
	Are first-aid supplies available on-site?
	Is there a first-aid trained person or persons on site?
	Are crew leaders and supervisors first aid trained?
Housekeeping	
	Is proper housekeeping maintained at the jobsite?
MASONRY	
	Do programs address issues and training on the specific job site?
	Are programs “effective in practice”?
	Are Safety Meetings held and documented as required?
	Was scaffold erection done under supervision of a Competent Person and pre-use inspections conducted?
	Is the base adequately supported?
	Is the planking adequate and properly installed?
	Are guardrails, cross bracing and other components adequate and properly installed?
	Note the exception for overhand bricklaying
	Do employees have adequate access routes to scaffold working levels?
	Other scaffolding issues as identified?
	Are ladders free of defects and being used within manufacturer’s specifications?
	Are ladders secured to prevent accidental displacement?
	Is the base of each ladder clear of obstructions?
	Do workers have both hands free when ascending and descending ladders?
	Other ladder issues as identified?
	Are Limited Access Zones established where appropriate?
	Are other applicable requirements being followed?
	Are materials stored tiered, stacked, racked or interlocked to prevent falling/collapse?
	Are workers protected from overhead power lines?

APPENDIX A: Checklists

	Are portable/fixed masonry saws guarded and is wet-method cutting or effective mechanical ventilation used?
	Is point of operation-guarded on mixers?
	Are exposed belts, pulleys; sprockets, etc. guarded?
	Are Powered Industrial Trucks used properly and operators' trained?
	Other material handling issues as identified?
	Is the training program conducted by a competent person?
	Have individual certification records been prepared that contain the name or other identity of the person trained, the date(s) of the training, and the signature of the employer or person who conducted the training?
	Is the latest training certification for all persons trained available for inspection?
	Is retraining conducted if a person can no longer recognize the hazards of falling or follow the proper procedures?
	Is retraining conducted when changes in the workplace render previous training obsolete?
	Is retraining conducted when changes in the types of fall protection systems or equipment render previous training obsolete?
	Is retraining conducted if a person cannot use fall protection systems or equipment or has not retained the requisite understanding or skill?
ROOFING	
	Are there enough barriers and is there other edge protection to stop people or materials falling from roofs?
	Do the roof battens provide safe hand and foot holds? If not, are crawling ladders or boards provided and used?
	During industrial roofing, are precautions taken to stop people falling from the leading edge of the roof or from fragile or partially fixed sheets which could give way?
	Are suitable barriers, guard rails or covers, etc provided where people pass or work near fragile material such as asbestos cement sheets and roof lights?
	Are crawling boards provided where work on fragile materials cannot be avoided?
	Are people excluded from the area below the roof work? If this is not possible, have additional precautions been taken to stop debris falling onto them?
SCAFFOLDING	
	Has the scaffold been constructed and loaded in accordance with the design of a qualified person and safety factor of 4 to 1?
	Has the maximum load capacity of this scaffold communicated to all employees?
	Is the load on the scaffold (including point loading) within the maximum load capacity of this particular scaffold?
	Are scaffolds and scaffold components inspected before each work shift by a competent person?
	Have employees who erect, disassemble, move, operate, repair, maintain, or inspect the scaffold been trained by a competent person to recognize the hazards associated with this type of scaffold and the performance of their duties related to this scaffold?

APPENDIX A: Checklists

	Have employees who use the scaffold been trained by a qualified person to recognize the hazards associated it with this scaffold and know the performance of their duties relating to it?
	Is the scaffold plumb, square, and level?
	Are all working platforms fully planked? (With less than 1 inch between planks or between planks and uprights?)
	Where the employer can demonstrate the necessity is the gap between the last plank and the uprights less than 9 inches?
	Are all working platforms at least 18 inches wide?
	Are the planks overlapped over supports?
	Are all abutted planks resting on separate support surfaces?
	Do planks extend at least 6 inches and no more than 12 inches over the supports?
	Are the planks in good condition and free of visible defects?
	Are the tops and bottom surfaces of scaffolds planks visible and free from paint or other opaque coverages?
	Does the scaffold have all required guardrails and toeboards?
	Are the open sides of the scaffold less than 14 inches from the face of the work?
	If open sides are more than 14 inches from the face of the work, is there proper fall protection available?
	Are platforms either extending over the centerlines of their supports by at least 6 inches or cleated, or restrained by hooks?
	Where the platform is less than 10 feet long and extends more than 12 inches over the support, have guardrails been installed?
	Where the platforms are more than 10 feet long, do they not extend more than 18 inches over the supports?
	Where scaffold components from different manufacturers are used, do they fit together without force and has their use been determined to be safe by a competent person?
	Has a Competent Person approved any use of dissimilar metals?
	Are 4:1 (height to width) scaffolds secured to a building or structure as required?
	Have ties been installed at a horizontal member that supports the inner and outer legs?
	Has the first vertical tie been installed at a height less than 4 times the minimum base dimension?
	Have vertical ties been repeated every 20 feet or less for scaffolds that are 3 feet or less in width?
	Are ties installed at each end of the scaffold structure and at no more than 30 foot horizontal intervals
	Are scaffolds erected on firm foundations?
	Is the scaffold on base plates and mudsills level, sound, and rigid?
	Are footings able to support at least 4 times the maximum intended load without settling? (Beware of frozen/thawing ground)

APPENDIX A: Checklists

STEEL ERECTION	
	Have you given written notification to the steel erector that: a. The concrete in the footing, piers, and walls and/or the mortar in the same have attained 75% of the intended minimum compressive design strength as determined by an ASTM standard test of field-cured samples? OR b. Has attained sufficient strength to support the loads imposed during steel erection.
	Prior to the erection of any column, have you given written notification to the steel erector of any repaired, replaced, or field-modified anchor rods and have you certified that those modifications were done with the approval of the project structural engineer of record?
	Prior to steel being placed all other construction trades and processes have been barred from conducting work beneath the steel erection activities unless overhead protection is provided?
	Have you made arrangements for the steel erector to leave the fall protection that they erected in place for the other trades to use?
	Are there adequate access roads into & through the site for the safe delivery & movement of derricks, cranes, trucks, & other necessary equipment?
	Is there sufficient access room for separate vehicular and pedestrian traffic?
	Is the site prepared in such a way that it is firm, properly graded, drained, and readily accessible to the work area?
	Is there adequate space for the safe storage of materials and the safe operation of the erector's equipment?
	Has the material handling procedure been pre-planned in such a way that no employee will be required to work beneath a suspended load?
	Has the steel erector provided you with a site-specific erection plan when they elect, due to the conditions specific to the site, to develop alternate means and methods that provide employee protection?
Hoisting and Rigging (1926.753)	
	Has the crane operator's license been checked to ensure that the operator is authorized to operate the equipment?
	Has the crane had an annual inspection and did it pass the inspection within the past year?
	Does the operator conduct an inspection of the machinery and moving parts before each use?
	Are accessible areas within the swing radius of the rear of the rotating superstructure of the crane barricaded in such a way as to prevent an employee from being struck or crushed by the crane?
	Is there an accessible fire extinguisher rated 5BC or above at the operator's station?
	Have you reiterated to the crane operator that they have direct control over the safety of the load and that whenever there is any doubt as to the safety of the load that they have the responsibility to stop and to refuse to handle the load until it is made safe?
	Has a qualified rigger inspected the rigging prior to the commencement of each shift?
	Are the safety latches on hooks operable?
	Are only employees engaged in steel connection or hooking or unhooking of the load permitted to be beneath a suspended load?
	When materials that are being hoisted are going to have to be swung over the heads of authorized workers who can work beneath them, are they rigged to prevent unintentional displacement and are the hooks equipped with self-closing safety latches?

APPENDIX A: Checklists

Structural Steel Assembly (1926.754)	
	Is there a fully planked or decked floor or nets maintained within two stories or 30 feet, whichever is less, directly under any erection work being performed?
	Is plumbing –up equipment in place and properly installed before the structure is loaded with construction material?
	Is metal decking secured against displacement before the end of the shift?
	Are all floor openings covered or protected by guardrails or nets?
	Has metal decking been secured immediately upon placement?
Column Anchorage (1926.755)	
	Are all columns anchored by a minimum of 4 anchor rods (anchor bolts)?
	Has a competent person determined whether guying or bracing is required?
Fall Protection (1926.760)	
	Have perimeter safety cables been installed at the final interior and exterior perimeters of the floors as soon as the metal decking has been installed?
	Are all employees engaged in steel erection that are on a walking/working surface which has an unprotected side or edge more than 15 feet above a lower level protected from a fall to that lower level by the use of a conventional fall protection system?
	Have all connectors been trained in accordance with 1926.761?
	Have connectors been provided with personal fall arrest system, positioning device system or fall restraint system and are wearing that equipment or are provided with other means of conventional fall protection when working from 15 to 30 feet high?
	In a Controlled Decking Zone only access to the zone is restricted to the employees engaged in the leading edge work?
	Are the boundaries of the CDZ clearly marked and within 90 feet of the leading edge?
	Have all employees working within the CDZ been trained in accordance with 1926.761?
	Unsecured decking does not exceed 3,000 sq. ft?
	No final deck attachments are made within a CDZ?
	Has the steel erector shown you evidence that all of their employees who will be exposed to fall hazards have been trained on those hazards?

Certification - Safe Work Practices

This is to certify that I have received a Safe Work Practices Handbook which instructions I will read and observe. I have also received Windover Construction Affirmative Action Policy Statement contained in the same handbook and will familiarize myself with the policy. I agree to contact Windover Construction Equal Employment Officer should I have any questions or comments.

I also understand that it is one of the requirements of my employment that in case I am injured while in the course of my work, I will immediately report it to my supervisor.

Last Name First Middle

Signed:

Witness:

Date:

Please return to office for employee file when complete.

Hazard Communication Plan

INTRODUCTION

This program has been developed by Windover Construction to provide adequate information, training, and protection for our employees who are exposed to hazardous chemicals in the fulfillment of their required job duties. Windover Construction is committed to protecting all aspects of their employees' health and safety while at work, and is committed to providing employees with the required information and ensuring that they understand how to protect themselves from the materials to which they are exposed at work. This program is designed to inform employees of all information required under 29 CFR 1910.1200, and to train employees on the Globally Harmonized System (GHS) of hazard communication.

GENERAL INFORMATION

In order to comply with 29 CFR 1910.1200, Hazard Communication, the following written Hazard Communication Program has been established for Windover Construction. All work units of the company are included within this program. The written program will be available in the Windover office, and in the field office at each job site, for review by any interested employee.

This program will help you understand and comply with the standard requirements of your work involving **hazardous chemicals and materials**. It is extremely important for you perform all of your work in a safe manner; if you have a question or do not know how to perform the task safely it is our expectation that you ask your supervisor before starting work. Your constant effort can prevent accidents and make the job safer.

Safety is doing your best to perform your daily tasks in a safe manner.

Safety is doing your best to protect people and equipment from hazards.

Safety is doing your best to follow all safety rules.

Safety is asking if you do not understand.

During orientation, your supervisor will advise you on local and site specific safety requirements. If they fail to inform you, ask if there are special requirements.

Hazard Communication Policies

1. Windover Construction projects shall comply with the applicable parts of OSHA 29 CFR Part 1910.1200, and the manufacturer's requirements and recommendations for any chemicals used. Where conflicts exist between standards, the more stringent shall apply.
2. Windover Construction and any subcontractors shall ensure that all employees potentially exposed to hazards associated with hazardous material handling/use possess the training, knowledge and skill required to perform the duties for which they are assigned.
3. Windover Construction and any subcontractors who use, handle or store hazardous substances must ensure that hazard information is made available to all affected groups concerning materials acquired and brought on-site by that contractor.
4. Ensure that SDSs (as hardcopies or electronic files) are available for all hazardous chemicals in the work area, stored or in use, during all shifts. Ensuring that work site chemical inventories are maintained and continually updated to include any new chemicals brought on-site.
5. Ensure that hazardous chemical containers are properly labeled. All containers of hazardous substance shall be labeled, or marked to identify the material and to provide appropriate warnings. Alternative methods such as signs, placards, process sheets, and operating procedures are acceptable for individual stationary process containers, as long as the information is conveyed to all affected persons.
 - Label must identify the chemical, and contain hazard warnings
 - Containers received with defaced or missing labels shall be rejected unless the contents are definitely known, and the container is immediately labeled with the appropriate information
 - Labels shall not be removed or defaced, and must remain intact and legible during use.
6. Windover Construction shall ensure that employees receive timely and appropriate Hazard Communication Training and additional training when there is substantial change in chemical usage or work practices.
7. If there is an event or an incident involving exposure to or release of a hazardous substance, cooperate with emergency response personnel by providing a copy of the SDSs and other relevant information.

Individual Responsibilities

Container Labeling

The Project Superintendent will verify that all containers received for use will:

- Be clearly labeled as to the contents, using the correct product identifier;
- Include needed signal words “Danger” or “Warning”
- Include required pictograms;
- Include the appropriate hazard statements;

The Project Superintendent on each job site will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer’s label or with a generic label which lists the identity of the material and provides a warning of any associated hazards, consistent with the labeling requirements of the hazard communication standard. For help with labeling, please see our safety/health officer.

The Vice President of Field Operations will review the company’s labeling system and update the system as required. This review will occur every two years.

Safety Data Sheets (SDSs)

The Vice President of Field Operations will be responsible for obtaining and maintaining the data sheet system for the company. Vice President of Field Operations or a Project Superintendent will review in-coming data sheets for new and significant health/safety information. He/she will see that any new information is passed on to the affected employees.

- Copies of SDSs for all hazardous chemicals to which employees of this company may be exposed will be kept in the Windover field office , and backup copies will be maintained at the Windover office.
- SDSs will be available to all employees in their work areas for review during each work shift.
- If SDSs are not available, or new chemicals in use do not have SDSs, immediately contact the materials manager.

Informing Contractors

It is the responsibility of Project Superintendents to provide contractors and their employees with the following information:

- Hazardous chemicals to which they may be exposed while on the job site;
- Precautions and protective measures employees may take to reduce the possibility of exposure.

The Project Manager for each project will be responsible for contacting each contractor before work is started at the company to gather information concerning the chemical hazards that the contractor is bringing to our workplace. This hazard information will be provided to all employees at the company who may be exposed to these chemicals.

Individual Responsibilities

Employee Training and Information

The Vice President of Operations is responsible for the employee training program. He/she will ensure that all elements specified below are carried out.

Prior to starting work, each new employee of Windover Construction will attend a health and safety orientation and will receive information and training on the following:

- An overview of the requirements contained in the Hazard Communication Standard, 29 CFR 1910.1200;
- Chemicals present in their workplace operations;
- Location and availability of our written hazard communication program;
- Physical and health effects of the hazardous chemical;
- Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area;
- How to lessen or prevent exposure to these hazardous chemicals through usage of control/work practices and personal protective equipment;
- Steps the company has taken to lessen/prevent exposure to these chemicals;
- Emergency procedures to follow if they are exposed to these chemicals;
- How to read labels and review SDSs to obtain hazard information;
- Location of SDS file and location of hazardous chemical list.

After attending the training class, each employee will sign a form to verify that they attended the training, received our written materials, and understood this company's policies on Hazard Communication.

Before a new chemical hazard is introduced on any job site of this company, each employee at that site will be given the hazard communication information outlined above. Project Superintendents are responsible for ensuring that SDSs on the new chemical(s) are available.

Labeling Requirements

The symbols, signal words, and hazard statements on labels have all been standardized and assigned to specific hazard categories and classes, as appropriate. This approach makes it easier for countries to implement the system and should make it easier for companies to comply with regulations based on the GHS.

The standardized label elements included in the GHS are:

- **Symbols (hazard pictograms):** Convey health, physical and environmental hazard information, assigned to a GHS hazard class and category.
- **Signal Words:** “Danger” or “Warning” are used to emphasize hazards and indicate the relative level of severity of the hazard
- **Hazard Statements:** Standard phrases assigned to a hazard class and category that describe the nature of the hazard.

Other GHS label elements include:

- **Precautionary Statements and Pictograms:** Measures to minimize or prevent adverse effects.
- **Product Identifier (ingredient disclosure):** Name or number used for a hazardous product on a label or in the SDS.
- **Supplier identification:** The name, address and telephone number should be provided on the label.
- **Supplemental information:** non-harmonized information.

Precautionary Statements and Pictograms

Precautionary information supplements the hazard information by briefly providing measures to be taken to minimize or prevent adverse effects from physical, health or environmental hazards. First aid is included in precautionary information.

HCS Pictograms and Hazards

Health Hazard	Flame	Exclamation Mark
 <ul style="list-style-type: none">▪ Carcinogen▪ Mutagenicity▪ Reproductive Toxicity▪ Respiratory Sensitizer▪ Target Organ Toxicity▪ Aspiration Toxicity	 <ul style="list-style-type: none">▪ Flammables▪ Pyrophorics▪ Self-Heating▪ Emits Flammable Gas▪ Self-Reactives▪ Organic Peroxides	 <ul style="list-style-type: none">▪ Irritant (skin and eye)▪ Skin Sensitizer▪ Acute Toxicity▪ Narcotic Effects▪ Respiratory Tract Irritant▪ Hazardous to Ozone Layer (Non-Mandatory)
 <ul style="list-style-type: none">▪ Gases Under Pressure	 <ul style="list-style-type: none">▪ Skin Corrosion/Burns▪ Eye Damage▪ Corrosive to Metals	 <ul style="list-style-type: none">▪ Explosives▪ Self-Reactives▪ Organic Peroxides
 <ul style="list-style-type: none">▪ Oxidizers	 <ul style="list-style-type: none">▪ Aquatic Toxicity	 <ul style="list-style-type: none">▪ Acute Toxicity (fatal or toxic)

Labeling Requirements

Product Identifier (Ingredient Disclosure)

A product identifier should be used on a GHS label and it should match the product identifier used on the SDS. The label for a substance should include the chemical identity of the substance. For mixtures/alloys, the label should include the chemical identities of all ingredients that contribute to acute toxicity, skin corrosion or serious eye damage, germ cell mutagenicity, carcinogenicity, reproductive toxicity, skin or respiratory sensitization, or Target Organ Systemic Toxicity (TOST), when these hazards appear on the label.

Supplier Identification

The name, address and telephone number of the manufacturer or supplier of the product should be provided on the label.

Supplemental Information

Supplemental label information is non-harmonized information on the container of a hazardous product that is not required or specified under the GHS. Supplemental information may be used to provide further detail that does not contradict or cast doubt on the validity of the standardized hazard information. It also may be used to provide information about hazards not yet incorporated into the GHS. The labeler should have the option of providing supplementary information related to the hazard, such as physical state or route of exposure, with the hazard statement.

A sample revised HCS label, identifying the required label elements, is shown below.

SAMPLE LABEL

PRODUCT IDENTIFIER

CODE

Product Name

HAZARD PICTOGRAMS



SIGNAL WORD

Danger

HAZARD STATEMENT

Highly flammable liquid and vapor.
May cause liver and kidney damage.

SUPPLEMENTAL INFORMATION

Directions for use

SUPPLIER IDENTIFICATION

Company Name _____

Street Address _____

City _____ State _____ Country _____ Postal Code _____

Emergency Phone Number _____

Labeling Requirements

PRECAUTIONARY STATEMENTS

Keep container tightly closed. Store in cool well ventilated place that is locked.

Keep away from heat/sparks/open flame. No smoking.

Only use non-sparking tools.

Use explosion-proof electrical equipment.

In Case of Fire: use dry chemical (BC) or Carbon dioxide (CO2) fire extinguisher to extinguish.

First Aid

If exposed call Poison Center.

If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.

Fill weight: _____ Lot Number_____

Gross weight: _____ Fill Date: _____

Expiration Date: _____

Safety Data Sheet Requirements

The (Material) Safety Data Sheet (SDS) provides comprehensive information for use in workplace chemical management. Employers and workers use the SDS as sources of information about hazards and to obtain advice on safety precautions. The SDS is product related and, usually, is not able to provide information that is specific for any given workplace where the product may be used.

Employers must ensure that SDSs are readily accessible to employees.

Minimum information for an SDS

1.	Identification of the substance or mixture and of the supplier	<ul style="list-style-type: none">• GHS product identifier.• Other means of identification.• Recommended use of the chemical and restrictions on use.• Supplier's details (including name, address, phone number, etc.).• Emergency phone number.
2.	Hazards identification	<ul style="list-style-type: none">• GHS classification of the substance/mixture and any national or regional information.• GHS label elements, including precautionary statements. (Hazard symbols may be provided as a graphical reproduction of the symbols in black and white or the name of the symbol, e.g., flame, skull and crossbones.)• Other hazards which do not result in classification (e.g., dust explosion hazard) or are not covered by the GHS.
3.	Composition/information on ingredients	<p>Substance</p> <ul style="list-style-type: none">• Chemical identity.• Common name, synonyms, etc.• CAS number, EC number, etc.• Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance. <p>Mixture</p> <ul style="list-style-type: none">• The chemical identity and concentration or concentration ranges of all ingredients which are hazardous within the meaning of the GHS and are present above their cutoff levels. <p>NOTE: For information on ingredients, the competent authority rules for CBI take priority over the rules for product identification.</p>
4.	First aid measures	<ul style="list-style-type: none">• Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion.• Most important symptoms/effects, acute and delayed.• Indication of immediate medical attention and special treatment needed, if necessary.

Safety Data Sheet Requirements

5.	Firefighting measures	<ul style="list-style-type: none">• Suitable (and unsuitable) extinguishing media.• Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products).• Special protective equipment and precautions for firefighters.
6.	Accidental release measures	<ul style="list-style-type: none">• Personal precautions, protective equipment and emergency procedures.• Environmental precautions.• Methods and materials for containment and cleaning up.
7.	Handling and storage	<ul style="list-style-type: none">• Precautions for safe handling.• Conditions for safe storage, including any incompatibilities.
8.	Exposure controls/personal protection.	<ul style="list-style-type: none">• Control parameters, e.g., occupational exposure limit values or biological limit values.• Appropriate engineering controls.• Individual protection measures, such as personal protective equipment.
9.	Physical and chemical properties	<ul style="list-style-type: none">• Appearance (physical state, color, etc.).• Odor.• Odor threshold.• pH.• melting point/freezing point.• initial boiling point and boiling range.• flash point.• evaporation rate.• flammability (solid, gas).• upper/lower flammability or explosive limits.• vapor pressure.• vapor density.• relative density.• solubility(ies).• partition coefficient: n-octanol/water.• autoignition temperature.• decomposition temperature.
10.	Stability and reactivity	<ul style="list-style-type: none">• Chemical stability.• Possibility of hazardous reactions.• Conditions to avoid (e.g., static discharge, shock or vibration).• Incompatible materials.• Hazardous decomposition products.

Safety Data Sheet Requirements

11.	Toxicological information	<p>Concise but complete and comprehensible description of the various toxicological (health) effects and the available data used to identify those effects, including:</p> <ul style="list-style-type: none">• information on the likely routes of exposure (inhalation, ingestion, skin and eye contact);• Symptoms related to the physical, chemical and toxicological characteristics;• Delayed and immediate effects and also chronic effects from short- and long-term exposure;• Numerical measures of toxicity (such as acute toxicity estimates).
12.	Ecological information	<ul style="list-style-type: none">• Ecotoxicity (aquatic and terrestrial, where available).• Persistence and degradability.• Bioaccumulative potential.• Mobility in soil.• Other adverse effects.
13.	Disposal considerations	<ul style="list-style-type: none">• Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.
14.	Transport information	<ul style="list-style-type: none">• UN Number.• UN Proper shipping name.• Transport Hazard class(es).• Packing group, if applicable.• Marine pollutant (Yes/No).• Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises.
15.	Regulatory information	<ul style="list-style-type: none">• Safety, health and environmental regulations specific for the product in question.
16.	Other information i.e. information on preparation and revision of the SDS	

Training Requirements and Guidelines

Objectives of Training:

- Develop safety attitude.
- Make employees aware of the hazardous chemicals.
- Motivate employees to protect themselves by preventing exposure to hazardous chemicals.
- Learn how to read and understand labels and MSDSs.
- Make employees aware of the Hazard Communication Standard and the Globally Harmonized System.

Topics Covered

- Identify what and where hazardous chemicals are found in the work area.
- The nature (odor, or visual appearance) and hazard of the chemical, including local and systemic toxicity.
- The specific nature of the operation involving hazardous chemicals that might result in employee exposure.
- The specific information to aid the employee in the recognition and evaluation of conditions and situations which may result in the release of hazardous chemicals.
- Purpose for and description of detection or monitoring devices.
- The purpose for and application of specific first-aid procedures and practices.
- The type, use, and limitations of personal protective equipment. This includes location and availability.
- Review of the Hazard Communication Standard.

Materials Used in Training

- Handout material.
- Audio-visual example of labels and Safety Data Sheets.
- Demonstration of protective equipment; what it is, how to wear it, where it is located.
- Quiz.
- Attendance records.

Assessing Effectiveness

- Were training objectives met?
- What parts of the training program need to be revised?
- What part of the program was already known and, consequently, unnecessary?
- What material was confusing?
- What material was missing?
- How often should training be repeated?
- What did the employee learn and/or fail to learn?

List of Non-Routine Jobs

Periodically, employees are required to perform hazardous non-routine tasks. Prior to starting work on such projects, each affected employee will be given information by their section supervisor about hazardous chemicals to which they may be exposed during such activity.

This information will include:

- Specific chemical hazards;
 - Protective/safety measures the employee can take;
 - Measures the company has taken to lessen the hazards, including ventilation, respirators, employee, and emergency procedures.

Examples of non-routine tasks performed by the employees of this company:

List of Hazardous Material

The following is a list of all known products which contain hazardous chemicals used by employees of (name of company). Further information on each noted chemical can be obtained by reviewing Safety Data Sheets located in the Windover Field Office, located at each job site. Secondary copies may also be available in the Windover Home Office.

Employer Compliance Program

Employer Checklist for Hazard Communication Program Requirements

The key elements that each employer must implement are a written program, employee training, and record availability and storage.

The Written Hazard Communication Program

1. Have you prepared a written list of all the hazardous chemicals present in the workplace?
2. Are you prepared to update your hazardous chemical list?
3. Do you have up-to-date Safety Data Sheets (SDSs) for those materials on your hazardous chemical list?
4. Is the list of hazardous chemicals cross-referenced so that identifiers on the list refer to the SDSs and warning labels?
5. Have you developed a system to ensure that all incoming hazardous chemicals are received with proper labels and MSD sheets?
6. Do you have procedures in your workplace to ensure proper labeling or warning signs for bulk storage or secondary usage containers that hold hazardous chemicals?
7. Do you have a complete list of the chemical hazards and precautions that you can give to outside contractors?
8. Do you have written procedures on how you will inform your employees of the chemical hazards associated with unlabeled pipes?
9. Have your employees been informed of the hazards associated with performing non- routine tasks (i.e., confined space, repair and maintenance operations)?
10. Is your hazard communication program in writing and available to your employees?

Information and Training

Have you developed an employee information and training program which includes the following:

1. Does the training cover all types of harmful chemicals with which the employee may come into contact under normal usage and foreseeable emergency?
2. Are your workers familiar with the different types of chemicals and the major hazards associated with them (i.e., solvents, corrosives)?
3. Are your employees aware of the specific requirements of the Hazard Communication Program?
4. Does your program train employees in: (a) operations where hazardous chemicals are present; location and availability of your written hazard communication program, including lists of chemicals and SDSs?
5. Does your training program include the explanation of labels and warnings that have been established in their work areas?
6. Do your employees understand methods to detect presence or release of chemicals at the workplace?
7. Does your training program provide information on the appropriate first-aid procedures in the event of an emergency?
8. Are employees trained in the proper work practices and personal protective equipment in relation to the hazardous chemicals in the work area?
9. Does the training include explanation of the labeling system and SDSs the employee can obtain and use?
10. Have you worked out a system to ensure that new employees are trained?
11. Have you developed a system with purchasing or other staff to make sure that additional training is provided if a new hazardous substance is introduced into the work area?
12. Do you have a system to ensure that the current (up-to-date) SDSs are in work areas where the chemicals are used?

Occupational Health and Environmental Controls

Hazard Communication

29 CFR 1910.1200 (29 CFR 1926.59)

Effective May 25, 2012

(a) Purpose.

(a)(1) The purpose of this section is to ensure that the hazards of all chemicals produced or imported are classified, and that information concerning the classified hazards is transmitted to employers and employees. The requirements of this section are intended to be consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Revision 3. The transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, safety data sheets and employee training.

(a)(2) This occupational safety and health standard is intended to address comprehensively the issue of classifying the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, and to preempt any legislative or regulatory enactments of a state, or political subdivision of a state, pertaining to this subject. Classifying the potential hazards of chemicals and communicating information concerning hazards and appropriate protective measures to employees, may include, for example, but is not limited to, provisions for: developing and maintaining a written hazard communication program for the workplace, including lists of hazardous chemicals present; labeling of containers of chemicals in the workplace, as well as of containers of chemicals being shipped to other workplaces; preparation and distribution of safety data sheets to employees and downstream employers; and development and implementation of employee training programs regarding hazards of chemicals and protective measures. Under section 18 of the Act, no state or political subdivision of a state may adopt or enforce any requirement relating to the issue addressed by this Federal standard, except pursuant to a Federally-approved state plan.

(b) Scope and application.

(b)(1) This section requires chemical manufacturers or importers to classify the hazards of chemicals which they produce or import, and all employers to provide information to their employees about the hazardous chemicals to which they are exposed, by means of a hazard communication program, labels and other forms of warning, safety data sheets, and information and training. In addition, this section requires distributors to transmit the required information to employers. (Employers who do not produce or import chemicals need only focus on those parts of this rule that deal with establishing a workplace program and communicating information to their workers.)

(b)(2) This section applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency.

(b)(3) This section applies to laboratories only as follows:

(i) Employers shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;

(ii) Employers shall maintain any safety data sheets that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible during each workshift to laboratory employees when they are in their work areas;

(iii) Employers shall ensure that laboratory employees are provided information and training in accordance with paragraph (h) of this section, except for the location and availability of the written hazard communication program under paragraph (h)(2)(iii) of this section; and,

Hazard Communication 29 CFR 1910.1200

(iv) Laboratory employers that ship hazardous chemicals are considered to be either a chemical manufacturer or a distributor under this rule, and thus must ensure that any containers of hazardous chemicals leaving the laboratory are labeled in accordance with paragraph (f) of this section, and that a safety data sheet is provided to distributors and other employers in accordance with paragraphs (g)(6) and (g)(7) of this section.

(b)(4) In work operations where employees only handle chemicals in sealed containers which are not opened under normal conditions of use (such as are found in marine cargo handling, warehousing, or retail sales), this section applies to these operations only as follows:

(i) Employers shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;

(ii) Employers shall maintain copies of any safety data sheets that are received with incoming shipments of the sealed containers of hazardous chemicals, shall obtain a safety data sheet as soon as possible for sealed containers of hazardous chemicals received without a safety data sheet if an employee requests the safety data sheet, and shall ensure that the safety data sheets are readily accessible during each work shift to employees when they are in their work area(s); and,

(iii) Employers shall ensure that employees are provided with information and training in accordance with paragraph (h) of this section (except for the location and availability of the written hazard communication program under paragraph (h)(2)

(iii) of this section), to the extent necessary to protect them in the event of a spill or leak of a hazardous chemical from a sealed container.

(b)(5) This section does not require labeling of the following chemicals:

(i) Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency;

(ii) Any chemical substance or mixture as such terms are defined in the Toxic Substances Control Act (15 U.S.C. 2601 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency;

(iii) Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device or product, including materials intended for use as ingredients in such products (e.g. flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) or the Virus-Serum-Toxin Act of 1913 (21 U.S.C. 151 et seq.), and regulations issued under those Acts, when they are subject to the labeling requirements under those Acts by either the Food and Drug Administration or the Department of Agriculture;

(iv) Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, as such terms are defined in the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol, Tobacco, Firearms and Explosives;

(v) Any consumer product or hazardous substance as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, when subject to a consumer product safety standard or labeling requirement of those Acts, or regulations issued under those Acts by the Consumer Product Safety Commission; and,

(vi) Agricultural or vegetable seed treated with pesticides and labeled in accordance with the Federal Seed Act (7 U.S.C. 1551 et seq.) and the labeling regulations issued under that Act by the Department of Agriculture.

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(b)(6) This section does not apply to:

(i) Any hazardous waste as such term is defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.), when subject to regulations issued under that Act by the Environmental Protection Agency;

(ii) Any hazardous substance as such term is defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601 et seq.) when the hazardous substance is the focus of remedial or removal action being conducted under CERCLA in accordance with Environmental Protection Agency regulations.

(iii) Tobacco or tobacco products;

(iv) Wood or wood products, including lumber which will not be processed, where the chemical manufacturer or importer can establish that the only hazard they pose to employees is the potential for flammability or combustibility (wood or wood products which have been treated with a hazardous chemical covered by this standard, and wood which may be subsequently sawed or cut, generating dust, are not exempted);

(v) Articles (as that term is defined in paragraph (c) of this section);

(vi) Food or alcoholic beverages which are sold, used, or prepared in a retail establishment (such as a grocery store, restaurant, or drinking place), and foods intended for personal consumption by employees while in the workplace;

(vii) Any drug, as that term is defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.), when it is in solid, final form for direct administration to the patient (e.g., tablets or pills); drugs which are packaged by the chemical manufacturer for sale to consumers in a retail establishment (e.g., over-the-counter drugs); and drugs intended for personal consumption by employees while in the workplace (e.g., first aid supplies);

(viii) Cosmetics which are packaged for sale to consumers in a retail establishment, and cosmetics intended for personal consumption by employees while in the workplace;

(ix) Any consumer product or hazardous substance, as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended;

(x) Nuisance particulates where the chemical manufacturer or importer can establish that they do not pose any physical or health hazard covered under this section;

(xi) Ionizing and nonionizing radiation; and,

(xii) Biological hazards.

(c) Definitions.

"Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

"Assistant Secretary" means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.

"Chemical" means any substance, or mixture of substances.

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"Chemical manufacturer" means an employer with a workplace where chemical(s) are produced for use or distribution.

"Chemical name" means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that will clearly identify the chemical for the purpose of conducting a hazard classification.

"Classification" means to identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

"Commercial account" means an arrangement whereby a retail distributor sells hazardous chemicals to an employer, generally in large quantities over time and/or at costs that are below the regular retail price.

"Common name" means any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

"Container" means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

"Designated representative" means any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

"Director" means the Director, National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.

"Distributor" means a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

"Employee" means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers or bank tellers who encounter hazardous chemicals only in non-routine, isolated instances are not covered.

"Employer" means a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

"Exposure or exposed" means that an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g. accidental or possible) exposure. "Subjected" in terms of health hazards includes any route of entry (e.g. inhalation, ingestion, skin contact or absorption.)

"Foreseeable emergency" means any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

"Hazard category" means the division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

"Hazard class" means the nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

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"Hazard not otherwise classified (HNOC)" means an adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in this section. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in this section, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g., acute toxicity Category 5).

"Hazard statement" means a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

"Hazardous chemical" means any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

"Health hazard" means a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to §1910.1200 -- Health Hazard Criteria.

"Immediate use" means that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

"Importer" means the first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States.

"Label" means an appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

"Label elements" means the specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

"Mixture" means a combination or a solution composed of two or more substances in which they do not react.

"Physical hazard" means a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. See Appendix B to §1910.1200 -- Physical Hazard Criteria.

"Pictogram" means a composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.

"Precautionary statement" means a phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

"Product identifier" means the name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used shall permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

"Produce" means to manufacture, process, formulate, blend, extract, generate, emit, or repackaging.

"Pyrophoric gas" means a chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below.

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"Responsible party" means someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

"Safety data sheet (SDS)" means written or printed material concerning a hazardous chemical that is prepared in accordance with paragraph (g) of this section.

"Signal word" means a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for the less severe.

"Simple asphyxiant" means a substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

"Specific chemical identity" means the chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

"Substance" means chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

"Trade secret" means any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it. Appendix E to §1910.1200—Definition of Trade Secret, sets out the criteria to be used in evaluating trade secrets.

"Use" means to package, handle, react, emit, extract, generate as a byproduct, or transfer.

"Work area" means a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

"Workplace" means an establishment, job site, or project, at one geographical location containing one or more work areas.

(d) Hazard classification.

(d)(1) Chemical manufacturers and importers shall evaluate chemicals produced in their workplaces or imported by them to classify the chemicals in accordance with this section. For each chemical, the chemical manufacturer or importer shall determine the hazard classes, and where appropriate, the category of each class that apply to the chemical being classified. Employers are not required to classify chemicals unless they choose not to rely on the classification performed by the chemical manufacturer or importer for the chemical to satisfy this requirement.

(d)(2) Chemical manufacturers, importers or employers classifying chemicals shall identify and consider the full range of available scientific literature and other evidence concerning the potential hazards. There is no requirement to test the chemical to determine how to classify its hazards. Appendix A to §1910.1200 shall be consulted for classification of health hazards, and Appendix B to §1910.1200 shall be consulted for the classification of physical hazards.

(d)(3) Mixtures.

(i) Chemical manufacturers, importers, or employers evaluating chemicals shall follow the procedures described in Appendices A and B to §1910.1200 to classify the hazards of the chemicals, including determinations regarding when mixtures of the classified chemicals are covered by this section.

(ii) When classifying mixtures they produce or import, chemical manufacturers and importers of mixtures may rely on the information provided on the current safety data sheets of the individual ingredients, except where the chemical manufacturer or importer knows, or in the exercise of reasonable diligence should know, that the safety data sheet misstates or omits information required by this section.

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(e) Written hazard communication program.

(e)(1) Employers shall develop, implement, and maintain at each workplace, a written hazard communication program which at least describes how the criteria specified in paragraphs (f), (g), and (h) of this section for labels and other forms of warning, safety data sheets, and employee information and training will be met, and which also includes the following:

(i) A list of the hazardous chemicals known to be present using a product identifier that is referenced on the appropriate safety data sheet (the list may be compiled for the workplace as a whole or for individual work areas); and,

(ii) The methods the employer will use to inform employees of the hazards of non-routine tasks (for example, the cleaning of reactor vessels), and the hazards associated with chemicals contained in unlabeled pipes in their work areas.

(e)(2) "Multi-employer workplaces." Employers who produce, use, or store hazardous chemicals at a workplace in such a way that the employees of other employer(s) may be exposed (for example, employees of a construction contractor working on-site) shall additionally ensure that the hazard communication programs developed and implemented under this paragraph (e) include the following:

(i) The methods the employer will use to provide the other employer(s) on-site access to safety data sheets for each hazardous chemical the other employer(s)' employees may be exposed to while working;

(ii) The methods the employer will use to inform the other employer(s) of any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies; and,

(iii) The methods the employer will use to inform the other employer(s) of the labeling system used in the workplace.

(e)(3) The employer may rely on an existing hazard communication program to comply with these requirements, provided that it meets the criteria established in this paragraph (e).

(e)(4) The employer shall make the written hazard communication program available, upon request, to employees, their designated representatives, the Assistant Secretary and the Director, in accordance with the requirements of 29 CFR 1910.1020 (e).

(e)(5) Where employees must travel between workplaces during a workshift, i.e., their work is carried out at more than one geographical location, the written hazard communication program may be kept at the primary workplace facility.

(f) Labels and other forms of warning.

(f)(1) Labels on shipped containers. The chemical manufacturer, importer, or distributor shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged or marked. Hazards not otherwise classified do not have to be addressed on the container. Where the chemical manufacturer or importer is required to label, tag or mark the following shall be provided:

(i) Product identifier;

(ii) Signal word;

(iii) Hazard statement(s);

(iv) Pictogram(s);

(v) Precautionary statement(s); and,

(vi) Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

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(f)(2) The chemical manufacturer, importer, or distributor shall ensure that the information provided under paragraphs (f)(1)(i) through (v) is in accordance with Appendix C, Allocation of Label Elements, for each hazard class and associated hazard category for the hazardous chemical, prominently displayed, and in English (other languages may also be included if appropriate).

(f)(3) The chemical manufacturer, importer, or distributor shall ensure that the information provided under paragraphs (f)(1)(ii) through (iv) is located together on the label, tag, or mark.

(f)(4) Solid materials

(i) For solid metal (such as a steel beam or a metal casting), solid wood, or plastic items that are not exempted as articles due to their downstream use, or shipments of whole grain, the required label may be transmitted to the customer at the time of the initial shipment, and need not be included with subsequent shipments to the same employer unless the information on the label changes;

(ii) The label may be transmitted with the initial shipment itself, or with the safety data sheet that is to be provided prior to or at the time of the first shipment; and,

(iii) This exception to requiring labels on every container of hazardous chemicals is only for the solid material itself, and does not apply to hazardous chemicals used in conjunction with, or known to be present with, the material and to which employees handling the items in transit may be exposed (for example, cutting fluids or pesticides in grains).

(f)(5) Chemical manufacturers, importers, or distributors shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged, or marked in accordance with this section in a manner which does not conflict with the requirements of the Hazardous Materials Transportation Act (49 U.S.C. 1801 et seq.) and regulations issued under that Act by the Department of Transportation.

(f)(6) Workplace labeling. Except as provided in paragraphs (f)(7) and (f)(8) of this section, the employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with either:

(i) The information specified under paragraphs (f)(1)(i) through (v) for labels on shipped containers; or,

(ii) Product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

(f)(7) The employer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the information required by paragraph (f)(6) of this section to be on a label. The employer shall ensure the written materials are readily accessible to the employees in their work area throughout each work shift.

(f)(8) The employer is not required to label portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer. For purposes of this section, drugs which are dispensed by a pharmacy to a health care provider for direct administration to a patient are exempted from labeling.

(f)(9) The employer shall not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.

(f)(10) The employer shall ensure that workplace labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift. Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well.

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(f)(11) Chemical manufacturers, importers, distributors, or employers who become newly aware of any significant information regarding the hazards of a chemical shall revise the labels for the chemical within six months of becoming aware of the new information, and shall ensure that labels on containers of hazardous chemicals shipped after that time contain the new information. If the chemical is not currently produced or imported, the chemical manufacturer, importer, distributor, or employer shall add the information to the label before the chemical is shipped or introduced into the workplace again.

(g) Safety data sheets.

(g)(1) Chemical manufacturers and importers shall obtain or develop a safety data sheet for each hazardous chemical they produce or import. Employers shall have a safety data sheet in the workplace for each hazardous chemical which they use.

(g)(2) The chemical manufacturer or importer preparing the safety data sheet shall ensure that it is in English (although the employer may maintain copies in other languages as well), and includes at least the following section numbers and headings, and associated information under each heading, in the order listed (See Appendix D to §1910.1200--Safety Data Sheets, for the specific content of each section of the safety data sheet):

- (i) Section 1, Identification;
- (ii) Section 2, Hazard(s) identification;
- (iii) Section 3, Composition/information on ingredients;
- (iv) Section 4, First-aid measures;
- (v) Section 5, Fire-fighting measures;
- (vi) Section 6, Accidental release measures;
- (vii) Section 7, Handling and storage;
- (viii) Section 8, Exposure controls/personal protection;
- (ix) Section 9, Physical and chemical properties;
- (x) Section 10, Stability and reactivity;
- (xi) Section 11, Toxicological information.

Note 1 to paragraph (g)(2): To be consistent with the GHS, an SDS must also include the following headings in this order:

- (xii) Section 12, Ecological information;
- (xiii) Section 13, Disposal considerations;
- (xiv) Section 14, Transport information; and
- (xv) Section 15, Regulatory information.

Note 2 to paragraph (g)(2): OSHA will not be enforcing information requirements in sections 12 through 15, as these areas are not under its jurisdiction.

- (xvi) Section 16, Other information, including date of preparation or last revision.

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(g)(3) If no relevant information is found for any sub-heading within a section on the safety data sheet, the chemical manufacturer, importer or employer preparing the safety data sheet shall mark it to indicate that no applicable information was found.

(g)(4) Where complex mixtures have similar hazards and contents (i.e. the chemical ingredients are essentially the same, but the specific composition varies from mixture to mixture), the chemical manufacturer, importer or employer may prepare one safety data sheet to apply to all of these similar mixtures.

(g)(5) The chemical manufacturer, importer or employer preparing the safety data sheet shall ensure that the information provided accurately reflects the scientific evidence used in making the hazard classification. If the chemical manufacturer, importer or employer preparing the safety data sheet becomes newly aware of any significant information regarding the hazards of a chemical, or ways to protect against the hazards, this new information shall be added to the safety data sheet within three months. If the chemical is not currently being produced or imported the chemical manufacturer or importer shall add the information to the safety data sheet before the chemical is introduced into the workplace again.

(g)(6)(i) Chemical manufacturers or importers shall ensure that distributors and employers are provided an appropriate safety data sheet with their initial shipment, and with the first shipment after a safety data sheet is updated;

(ii) The chemical manufacturer or importer shall either provide safety data sheets with the shipped containers or send them to the distributor or employer prior to or at the time of the shipment;

(iii) If the safety data sheet is not provided with a shipment that has been labeled as a hazardous chemical, the distributor or employer shall obtain one from the chemical manufacturer or importer as soon as possible; and,

(iv) The chemical manufacturer or importer shall also provide distributors or employers with a safety data sheet upon request.

(g)(7)(i) Distributors shall ensure that safety data sheets, and updated information, are provided to other distributors and employers with their initial shipment and with the first shipment after a safety data sheet is updated;

(ii) The distributor shall either provide safety data sheets with the shipped containers, or send them to the other distributor or employer prior to or at the time of the shipment;

(iii) Retail distributors selling hazardous chemicals to employers having a commercial account shall provide a safety data sheet to such employers upon request, and shall post a sign or otherwise inform them that a safety data sheet is available;

(iv) Wholesale distributors selling hazardous chemicals to employers over-the-counter may also provide safety data sheets upon the request of the employer at the time of the over-the-counter purchase, and shall post a sign or otherwise inform such employers that a safety data sheet is available;

(v) If an employer without a commercial account purchases a hazardous chemical from a retail distributor not required to have safety data sheets on file (i.e., the retail distributor does not have commercial accounts and does not use the materials), the retail distributor shall provide the employer, upon request, with the name, address, and telephone number of the chemical manufacturer, importer, or distributor from which a safety data sheet can be obtained;

(vi) Wholesale distributors shall also provide safety data sheets to employers or other distributors upon request; and,

(vii) Chemical manufacturers, importers, and distributors need not provide safety data sheets to retail distributors that have informed them that the retail distributor does not sell the product to commercial accounts or open the sealed container to use it in their own workplaces.

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(g)(8) The employer shall maintain in the workplace copies of the required safety data sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). (Electronic access and other alternatives to maintaining paper copies of the safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options.)

(g)(9) Where employees must travel between workplaces during a workshift, i.e., their work is carried out at more than one geographical location, the safety data sheets may be kept at the primary workplace facility. In this situation, the employer shall ensure that employees can immediately obtain the required information in an emergency.

(g)(10) Safety data sheets may be kept in any form, including operating procedures, and may be designed to cover groups of hazardous chemicals in a work area where it may be more appropriate to address the hazards of a process rather than individual hazardous chemicals. However, the employer shall ensure that in all cases the required information is provided for each hazardous chemical, and is readily accessible during each work shift to employees when they are in their work area(s).

(g)(11) Safety data sheets shall also be made readily available, upon request, to designated representatives, the Assistant Secretary, and the Director, in accordance with the requirements of 29 CFR 1910.1020(e).

(h) Employee information and training.

(h)(1) Employers shall provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new chemical hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and safety data sheets.

(h)(2) Information. Employees shall be informed of:

(i) The requirements of this section;

(ii) Any operations in their work area where hazardous chemicals are present; and,

(iii) The location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and safety data sheets required by this section.

(h)(3) Training. Employee training shall include at least:

(i) Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);

(ii) The physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work area;

(iii) The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and,

(iv) The details of the hazard communication program developed by the employer, including an explanation of the labels received on shipped containers and the workplace labeling system used by their employer; the safety data sheet, including the order of information and how employees can obtain and use the appropriate hazard information.

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(i) Trade secrets.

- (1) The chemical manufacturer, importer, or employer may withhold the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture, from the safety data sheet, provided that:
- (i) The claim that the information withheld is a trade secret can be supported;
 - (ii) Information contained in the safety data sheet concerning the properties and effects of the hazardous chemical is disclosed;
 - (iii) The safety data sheet indicates that the specific chemical identity and/or percentage of composition is being withheld as a trade secret; and,
 - (iv) The specific chemical identity and percentage is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of this paragraph.

(i)(2) Where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity and/or specific percentage of composition of a hazardous chemical is necessary for emergency or first-aid treatment, the chemical manufacturer, importer, or employer shall immediately disclose the specific chemical identity or percentage composition of a trade secret chemical to that treating physician or nurse, regardless of the existence of a written statement of need or a confidentiality agreement. The chemical manufacturer, importer, or employer may require a written statement of need and confidentiality agreement, in accordance with the provisions of paragraphs (i)(3) and (4) of this section, as soon as circumstances permit.

(i)(3) In non-emergency situations, a chemical manufacturer, importer, or employer shall, upon request, disclose a specific chemical identity or percentage composition, otherwise permitted to be withheld under paragraph (i)(1) of this section, to a health professional (i.e. physician, industrial hygienist, toxicologist, epidemiologist, or occupational health nurse) providing medical or other occupational health services to exposed employee(s), and to employees or designated representatives, if:

- (i) The request is in writing;
- (ii) The request describes with reasonable detail one or more of the following occupational health needs for the information:
 - (A) To assess the hazards of the chemicals to which employees will be exposed;
 - (B) To conduct or assess sampling of the workplace atmosphere to determine employee exposure levels;
 - (C) To conduct pre-assignment or periodic medical surveillance of exposed employees;
 - (D) To provide medical treatment to exposed employees;
 - (E) To select or assess appropriate personal protective equipment for exposed employees;
 - (F) To design or assess engineering controls or other protective measures for exposed employees; and,
 - (G) To conduct studies to determine the health effects of exposure.
- (iii) The request explains in detail why the disclosure of the specific chemical identity or percentage composition is essential and that, in lieu thereof, the disclosure of the following information to the health professional, employee, or designated representative, would not satisfy the purposes described in paragraph (i)(3)(ii) of this section:
 - (A) The properties and effects of the chemical;
 - (B) Measures for controlling workers' exposure to the chemical;
 - (C) Methods of monitoring and analyzing worker exposure to the chemical; and,
 - (D) Methods of diagnosing and treating harmful exposures to the chemical;
- (iv) The request includes a description of the procedures to be used to maintain the confidentiality of the disclosed information; and,

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(v) The health professional, and the employer or contractor of the services of the health professional (i.e. downstream employer, labor organization, or individual employee), employee, or designated representative, agree in a written confidentiality agreement that the health professional, employee, or designated representative, will not use the trade secret information for any purpose other than the health need(s) asserted and agree not to release the information under any circumstances other than to OSHA, as provided in paragraph (i)(6) of this section, except as authorized by the terms of the agreement or by the chemical manufacturer, importer, or employer.

(i)(4) The confidentiality agreement authorized by paragraph (i)(3)(iv) of this section:

(i) May restrict the use of the information to the health purposes indicated in the written statement of need;

(ii) May provide for appropriate legal remedies in the event of a breach of the agreement, including stipulation of a reasonable pre-estimate of likely damages; and,

(iii) May not include requirements for the posting of a penalty bond.

(i)(5) Nothing in this standard is meant to preclude the parties from pursuing non-contractual remedies to the extent permitted by law.

(i)(6) If the health professional, employee, or designated representative receiving the trade secret information decides that there is a need to disclose it to OSHA, the chemical manufacturer, importer, or employer who provided the information shall be informed by the health professional, employee, or designated representative prior to, or at the same time as, such disclosure.

(i)(7) If the chemical manufacturer, importer, or employer denies a written request for disclosure of a specific chemical identity or percentage composition, the denial must:

(i) Be provided to the health professional, employee, or designated representative, within thirty days of the request;

(ii) Be in writing;

(iii) Include evidence to support the claim that the specific chemical identity or percent of composition is a trade secret;

(iv) State the specific reasons why the request is being denied; and,

(v) Explain in detail how alternative information may satisfy the specific medical or occupational health need without revealing the trade secret.

(i)(8) The health professional, employee, or designated representative whose request for information is denied under paragraph (i)(3) of this section may refer the request and the written denial of the request to OSHA for consideration.

(i)(9) When a health professional, employee, or designated representative refers the denial to OSHA under paragraph (i)(8) of this section, OSHA shall consider the evidence to determine if:

(i) The chemical manufacturer, importer, or employer has supported the claim that the specific chemical identity or percentage composition is a trade secret;

(ii) The health professional, employee, or designated representative has supported the claim that there is a medical or occupational health need for the information; and,

(iii) The health professional, employee or designated representative has demonstrated adequate means to protect the confidentiality.

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(i)(10)(i) If OSHA determines that the specific chemical identity or percentage composition requested under paragraph (i)(3) of this section is not a "bona fide" trade secret, or that it is a trade secret, but the requesting health professional, employee, or designated representative has a legitimate medical or occupational health need for the information, has executed a written confidentiality agreement, and has shown adequate means to protect the confidentiality of the information, the chemical manufacturer, importer, or employer will be subject to citation by OSHA.

(ii) If a chemical manufacturer, importer, or employer demonstrates to OSHA that the execution of a confidentiality agreement would not provide sufficient protection against the potential harm from the unauthorized disclosure of a trade secret, the Assistant Secretary may issue such orders or impose such additional limitations or conditions upon the disclosure of the requested chemical information as may be appropriate to assure that the occupational health services are provided without an undue risk of harm to the chemical manufacturer, importer, or employer.

(i)(11) If a citation for a failure to release trade secret information is contested by the chemical manufacturer, importer, or employer, the matter will be adjudicated before the Occupational Safety and Health Review Commission in accordance with the Act's enforcement scheme and the applicable Commission rules of procedure. In accordance with the Commission rules, when a chemical manufacturer, importer, or employer continues to withhold the information during the contest, the Administrative Law Judge may review the citation and supporting documentation "in camera" or issue appropriate orders to protect the confidentiality of such matters.

(i)(12) Notwithstanding the existence of a trade secret claim, a chemical manufacturer, importer, or employer shall, upon request, disclose to the Assistant Secretary any information which this section requires the chemical manufacturer, importer, or employer to make available. Where there is a trade secret claim, such claim shall be made no later than at the time the information is provided to the Assistant Secretary so that suitable determinations of trade secret status can be made and the necessary protections can be implemented.

(i)(13) Nothing in this paragraph shall be construed as requiring the disclosure under any circumstances of process information which is a trade secret.

(j) Effective dates. (1) Employers shall train employees regarding the new label elements and safety data sheets format by December 1, 2013.

(2) Chemical manufacturers, importers, distributors, and employers shall be in compliance with all modified provisions of this section no later than June 1, 2015, except:

(i) After December 1, 2015, the distributor shall not ship containers labeled by the chemical manufacturer or importer unless the label has been modified to comply with paragraph (f)(1) of this section.

(ii) All employers shall, as necessary, update any alternative workplace labeling used under paragraph (f)(6), update the hazard communication program required by paragraph (h)(1), and provide any additional employee training in accordance with paragraph (h)(3) for newly identified physical or health hazards no later than June 1, 2016.

(3) Chemical manufacturers, importers, distributors, and employers may comply with either §1910.1200 revised as of October 1, 2011, or the current version of this standard, or both during the transition period.

Hazard Communication Manual Certificate

This is to certify that I have received a Hazard Communication Manual which instructions I will read and observe.

Last Name

First

Middle

Signed:

Witness:

Date:

Please return to office for employee file when complete.

Hazard Communication Training Certificate

I have received Hazard Communication Training as described in the Windover Construction Hazard Communication Program.

The training was conducted on _____

Attendee's Name _____

Attendee's Signature _____

Instructor's Signature _____