



Safety Manual

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Section 1- Management Safety Policy Statement

It is the policy of Casey-Bertram to strive for the highest safety standards on our projects. Safety does not occur by chance. It is the result of careful attention to all company operations by those who are directly and indirectly involved. Employees at all levels must work diligently to execute the company's policy of maintaining safety and occupational health.

Our safety program has been developed to assure compliance with Federal, State and Local regulations, with particular emphasis on the Occupational Safety and Health Act of 1970 (OSHA), and the OSHA requirements that apply to our construction operations (29 CFR Part 1926). It is the obligation of all employees to be knowledgeable of the standards established by these agencies and to implement the rules and regulations contained therein on projects under their direction.

Regard for the safety of the general public, our own employees and the employees of our subcontractors, is a supreme responsibility of all levels of our organization. We intend to prevent all injuries, property damage, fire damage and occupational illnesses. All could result in human suffering. Accidents, even minor ones, cause both physical and mental pain. Prevention of injury and illness is a goal well worth our achieving.

A safe operation is organized, clean, and efficient. If every employee views accidents in the same way we consider all other aspects of our operations, we will be in a better position to not only control accidents, but also to improve the total performance of our company. It is therefore of utmost importance that all aspects of our safety program be strictly adhered to and that the intent of this program be followed to the letter. Any recommendations to improve our safety program are encouraged.

Signature _____
President

Section 2- Roles and Responsibilities

Purpose

To establish and assign specific safety and health responsibilities to all Casey-Bertram's employees. To provide authority to our employees for developing, maintaining, administering, and implementing the Casey-Bertram's Health and Safety Program.

References

29 CFR 1926

Definitions

Responsibility – an assigned task for which one is accountable, even if the actual performance is delegated to other capable and knowledgeable Individuals.

Responsibilities

President

- Establishes safety and health program according to standards of OSHA.
- Creates safety and health goals for the company.
- Directs and ensures effectiveness of the safety and health program.
- Reviews incident, accident and property damage.
- Establishes safety goals for the company, annually or as needed.

Safety Officer

- Participates in injury and incident investigations.
- Develops, administers, implements, and enforces the company's safety and health program.
- Keeps OSHA Log and Summary Reports up to date.
- Responds to all employees' safety and health suggestions as appropriate.
- Communicates with regulatory agencies and the company's insurance representative.
- Coordinates safety-training programs for management and employees.
- Maintains and updates all company safety records and medical records.
- Reports directly to upper management.
- Conducts random safety inspections.
- Attends the OSHA 30 hour construction course.

Managers

- Provides materials, equipment, manpower, and additional resources as needed to support the program.
- Establishes and monitors the emergency action plans for project sites.
- Inspects regularly all job-sites and corrects or controls any safety hazards.
- Responds to all employees' safety and health suggestions as appropriate.
- Maintains knowledge of Federal and State OSHA Regulations for each work area.
- Provides periodic safety talks, proper personal protective equipment, first aid kits, regulation posters, and emergency action plans.
- Supports actively the company's safety and health program in verbal and written communication, training, meetings, and inspections and by personal compliance.
- Establishes and maintains a safe and healthful working environment for all employees and subcontractors.

- Inspects tools and equipment to ensure safe operating and arranges for their repair or replacement when needed.
- Stops and corrects all unsafe practices.
- Keeps work areas and emergency exits clean and orderly at all times.
- Corrects all safety hazards and conditions under his/her authority.

Employees

- Actively support the company's safety and health program in verbal and written communication, training, meetings, inspections and by personal compliance.
- Learn and adhere to all safety regulations and policies.
- Keep work area and emergency exits clean and orderly at all times.
- Follow safe and proper usage of tools and machines used at all jobsites.
- Attend and participates in all safety training sessions.
- Submit safety suggestions and ideas to the Safety Officer.
- Submit safety hazards to the Project Managers and/or Safety Officer.
- Refrain from conducting any task for which he/she has not been trained.

Section 3- General Safety Policies

Purpose

To establish general company safety rules that is applicable to all employees and operations.

Definitions

General Safety Rules - Rules that are applicable to employees, visitors, suppliers, and subcontractors who may be present on Casey-Bertram premises or jobsites, at company functions, or traveling between these locations on Company business. These rules are "common sense" rules and are not meant to replace more specific procedures applicable to specific operation covered by OSHA, EPA, and/or DOT regulations.

Responsibilities

The Project Manager will ensure that subcontractors, suppliers, and visitors are aware of and comply with the General Safety Rules.

All employees are required to follow these rules. Project Managers will instruct and train their employees in the General Safety Rules.

The Safety Officer will instruct new employees in the General Safety Rules during New Hire Orientation.

Procedures

Employees will use care in the performance of their assigned tasks and act in a manner that will assure maximum safety to themselves, fellow employees, and the general public.

All injuries and incidents must be reported immediately to the Project Manager. Proper forms will be completed, signed, and turned in to the Safety Officer.

Horseplay, trickery, scuffling, or other unsafe behavior is prohibited, and those responsible are subject to dismissal.

Power equipment, tools, and other equipment will not be operated without the manufacturer's safety guards or other protective devices in place.

All defective or unsafe equipment, tools, or machinery will be taken out of service and properly tagged.

All employees will regularly attend safety meetings.

The more stringent of Company regulations or Government regulations will be adhered to.

Leather-type work boots are mandatory. Athletic shoes, soft-soled shoes, sandals, open-toed or open-heeled shoes are not permitted. (See Personal Protective Equipment)

The use of drugs, alcohol, or any mind-altering substance will not be tolerated under any circumstances. (See Substance Abuse)

A one-day supply of prescription medicine may be carried. The employee's immediate Project Manager is to be made aware of this situation when it occurs.

No employee will operate machinery or tools that have been locked/tagged out.

All employees will familiarize themselves with the Emergency Response Plan. (See Emergency Response Plan)

Prior to using ladders, the employee must ensure the ladders are in good condition, firmly placed and anchored. Only one employee at a time is to be on the same ladder. All ladders are to conform to OSHA and state regulations.

Employees are not to drop or throw anything from an elevated area without warning persons below.

Employees must learn to lift properly, with the legs and not the back. Employees must get help with heavy loads.

Firearms, explosives, or unlawful weapons are prohibited on company property and in company vehicles of Casey-Bertram. Violation of this rule is grounds for immediate dismissal.

Fighting and personal harassment will not be tolerated on company premises, and may result in immediate termination.

Employees must observe and obey all Non Smoking areas, offices and buildings.

Employees must observe and obey all caution and danger signs/tape, barricades, and safety permits.

Rings and/or other jewelry should be removed while working with or around machinery, moving parts, or belts.

Loose or ragged clothing will not be worn while working with or around machinery, moving parts, belts, or mechanical tools.

Shirts are to be worn at all times and must have sleeves.

Good housekeeping is to be practiced at all times. Waste materials will be disposed of properly, and will not be allowed to accumulate in the work area. Disposal of hazardous materials will be done in accordance with the manufacturer's recommendations and local/state regulations. (See Hazard Communication)

All personal hand and power tools are required to be in proper working order. This includes strain relief on plugs, ground prongs, proper polarity, cords without cuts or splices, and handles without cracks or splinters.

Specific Rules: Additional safe work practices will be developed and implemented for special case operations and tasks. These special cases may require development of special rules and/or procedures. Trade associations, government agencies, professional societies, or academic resource centers may also be sources of help in development of these specific rules.

ACCESS 1926.34

In every building or structure, exits will be arranged and maintained to provide free and unobstructed egress from all parts of the building or structure at all times when it is occupied. Access to exits will be marked by readily visible signs in all cases where the exit or way to reach it is not immediately visible to the occupants. Means of egress will be continually maintained free of all obstructions or impediments to allow full and instant use in the case of fire or other emergency.

ASBESTOS 1926.1101

Asbestos is a widely used, mineral-based material that is resistant to heat and corrosive chemicals. Depending on the chemical composition, fibers may range in texture from coarse to silky. The properties that make asbestos fibers so valuable are its high-tensile strength, flexibility, heat and chemical resistance, and good frictional properties.

Asbestos fibers enter the body by inhalation of airborne particles or ingestion and can become embedded in the tissues of the respiratory or digestive systems. Years of exposure to asbestos can cause numerous disabling or fatal diseases. Among these diseases are asbestosis (an emphysema-like condition), lung cancer, mesothelioma (a cancerous tumor that spreads rapidly in the membranes covering the lungs and body organs), and gastrointestinal cancer.

Asbestos may be found in building siding, floor tile, and roof/pipe insulation manufactured before the mid-seventies. Casey-Bertram employees that could potentially come in contact with asbestos should not disturb the asbestos, but should notify the appropriate personnel at a jobsite. If asbestos is suspected or found in the office environment, do not disturb the suspected material and immediately notify the Safety Officer. The Safety Officer will contact the appropriate personnel for testing and, if necessary, removal of the material.

ATTITUDE

All company employees are required to treat safety as the number one priority. As such, they are expected to report to work in good mental and physical condition to safely perform their assigned duties. Before starting any task, employees must consider the possible effects of their actions on themselves and others and take appropriate protective measures.

ELECTRICAL- GENERAL 1926.400 - .449

All extension cords must be 3-wire type and rated hard or extra-hard usage. Bulbs on temporary light strands will be equipped with guards. Temporary lights may not be suspended using staples, nails, wires, etc. Temporary lights must be hung properly, using the rings provided on top of each fixture.

No cord or tool with a damaged ground plug may be used. Splices must have soldered wire connections with insulation equal to the cable. Worn or frayed cables may not be used.

Each disconnecting means for motors, appliances, and each service feeder or branch circuit at point of origin, must be legibly marked to indicate its purpose. Unless located and arranged so that the purpose is evident.

Cable passing through work areas will be covered or elevated to protect from damage. Electrical boxes with covers, for the purpose of disconnecting must be secured and rigidly fastened to mounting surface.

No employee may work in proximity to any electric power circuit that may be contacted during the course of work. Unless protected against electric shock by deenergizing circuit and grounding it or by guarding with an effective insulation. In work areas where the exact location of underground electric power lines is unknown, workers using jackhammers, bars or other hand tools must wear insulated protective gloves.

ELECTRICAL-GFCI OR INSPECTION 1926.404

15 and 20-ampere receptacle outlets on single-phase, 120-volt circuits for construction sites which are not a part of the permanent wiring of the building or structure must be protected by ground-fault circuit interrupters.

Each cord set, attachment cap, plug and receptacle of cord sets and any equipment connected by cord and plug must be inspected for external defects and possible internal damage, except cords sets and receptacles which are fixed and not exposed to damage. Defective items must be immediately removed from service or repaired.

FIRE PROTECTION 1926.150 -.155

All firefighting equipment will be conspicuously located and readily accessible to all personnel. Fire extinguishers must be inspected monthly and certified once per year.

A fire extinguisher rated 2A must be provided for each 3000 square feet of building space. The travel distance to the nearest fire extinguisher will not exceed 100 feet. At least one fire extinguisher will be located adjacent to each stairway on each floor. This applies to both the Casey-Bertram facility office and the jobsite. On-site contractors must ensure that fire extinguishers are readily available and that employees are trained, a fire protection program has been developed, and that an alarm system for evacuation purposes is in place for the jobsite.

Classifications of fires include the following:

- Class A: Fire involving ordinary combustible materials such as wood and paper can be extinguished with water or solutions containing large percentages of water.
- Class B: Fire involving flammable materials such as greases and oils can be extinguished by smothering or eliminating air.
- Class C: Fire in or near electrical equipment, a nonconductive extinguishing agent will be of first importance, such as dry chemical.
- Class D: Fire involving flammable materials such as magnesium can be extinguished with dry powders.

A jobsite may also contain flammable materials that are any liquid, solid, or gas that has a flash point above 100 degrees Fahrenheit. Flammable liquids will be stored in and dispense from approved containers. Adequate ventilation for storage and use of flammable liquids will be provided. Containers will have the appropriate label.

Adequate ventilation and elimination of all ignition sources is mandatory when dealing with flammable vapors. All open flames and sparks will be eliminated when flammable liquids are used.

To prevent spontaneous combustion at the jobsite, flammable waste must be stored in airtight containers. Flammable waste material containers must be emptied daily. To prevent static electricity, flammable liquid dispensing vessels must be grounded. Containers must be bonded when transferring flammable liquids to prevent an arc from occurring.

When welding and cutting is performed at the jobsite, fire surveys must be performed prior to the inception of work. Combustible materials must be removed or covered prior to welding or cutting and a fire extinguisher must be present. Hot work permits may be issued before any welding or cutting is performed. Combustibles and flammable materials must be kept away from hot surfaces.

FIRST AID AND CPR

In the absence of a clinic or doctor that is reasonably accessible in terms of time and distance, at least 1 person from the organization will be trained and certified to provide first aid and Cardio Pulmonary Resuscitation (CPR). All Project Managers will be certified in first aid and CPR.

A first aid kit will be provided for each jobsite. Project Managers are responsible to ensure that the kits are properly stocked and maintained.

Only trained first aid personnel will administer first aid at the jobsite.

FLAMMABLE AND COMBUSTIBLE LIQUIDS 1926.152

Only approved containers (i.e. metal safety cans with self-closing lids) and portable tanks will be used for storage and handling of flammable and combustible liquids.

No more than 25 gallons of flammable or combustible liquids may be stored in a room outside of an approved storage cabinet.

No more than three storage cabinets may be located in a single storage area. Inside storage for flammable and combustible liquids must be of fire-resistive construction, with self-closing fire doors, 4-inch sills or depressed floors, a ventilation system of at least six air changes per hour, and electrical wiring and equipment approved for Class 1, Division 1 locations.

Storage in containers outside of buildings may not exceed 1,000 gallons in any one pile or area. Storage areas must be graded to divert possible spills away from buildings or other exposures, or surround storage areas with a curb or dike. Storage areas must be located at least 20 feet from any building and keep free from weeds, debris, and other combustible materials. Flammable liquids must be kept in closed containers when not in use.

GASES, VAPORS, FUMES, DUST AND MISTS 1926.55

Exposure to toxic gases, vapors, fumes, dusts, and mists at a concentration above those specified in the "Threshold Limit Values of Airborne Contaminants" of the ACGIH should be avoided.

When engineering and administrative controls are not feasible to achieve full compliance, protective equipment or other protective measures will be used to keep the exposure of employees to air contaminants within the limits prescribed. A technically qualified person must review any equipment and technical measures used for the purpose for each particular use. Employees will wear all furnished equipment at all times.

HAND TOOLS 1926.300 - .307

Employees will not use unsafe hand tools. Wrenches may not be used when jaws are sprung to the point slippage occurs. Keep impact tools free of mushroomed heads. Wooden tool handles must be kept free of splinters or cracks and a tight connection between the tool head and the handle must be assured.

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

HORSEPLAY

All disruptive activities usually referred to as "horseplay" is forbidden.

HOUSEKEEPING 1926.25

Form and scrap lumber with protruding nails and other debris will be kept clear from work areas. All combustible scrap and debris must be removed at regular intervals. Containers will be provided for collection and separations of all refuse. Covers are required on containers used for flammable or harmful substances.

At the end of each phase of work, all tools and excess materials must be returned to proper storage. All debris must be cleaned up before moving on to the next phase. Employees are responsible for keeping their work areas clean.

INJURIES

All injuries, even those that appear to be slight, will be reported immediately to your Project Manager.

When approved by attending physician, Casey-Bertram will assign the employee to light duty work.

LADDERS

Ladders will be inspected frequently for visible defects and those which have developed defects will be withdrawn from service for repair or destruction. (Defective ladders must be tagged or marked as "Dangerous, Do Not Use") The inspection includes but is not limited to the following:

- Cracked or missing rungs
- Cracked side rails
- Rotted and decaying wood
- Missing or damaged non-slip feet
- Construction requirements for job-built ladders
- Tie-off requirements
- 3-foot extension requirements

When transporting, ladders should be carried in the horizontal position to avoid contact with overhead electrical conductors.

If a ladder does not pass inspection, it should be removed until the necessary repairs can be made. If for some reason the ladder cannot be removed, it must be "TAGGED-OUT" of service until the necessary repairs can be made. **DO NOT USE AN UNSAFE LADDER!**

A ladder will be provided at all personnel points of access when there is a break in elevation of 19" or more to gain access to different levels of the building structure, and no ramp, runway, sloped embankment, or personnel hoist is provided.

- Each ladder will be capable of supporting 4 times its maximum intended load.
- Ladder rungs, cleats, and steps will be parallel, level, and uniformly spaced.
- Ladder components will be surfaced so as to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.

Ladder side rails will extend 3 feet above the landing surface to which the ladder is used to gain access, or when such an extension is not possible the ladder will be secured from movement at its top to a rigid support that will not deflect, a grasping device, such as a grab rail, will be provided to assist employees in mounting and dismounting the ladder.

- Ladders will be maintained free of oil, grease, and other slipping hazards.
- Ladders will only be used on level stable surfaces, unless secured to prevent accidental displacement.
- Ladders placed in passageways, doorways, or driveways will be completely secured, or the area will be completely barricaded to keep activities away from the ladder.

The areas around the top and base of the ladder will be kept clear.

- Ladders will not be moved, shifted, or extended while occupied.
- The top or top step will not be used for a step on a stepladder.
- Ladders with defects **WILL BE PLAINLY MARKED - "DO NOT USE" AND REMOVED FROM SERVICE.**
- Employees will use at least one hand to grasp the ladder when ascending or descending
- Employees will not carry any objects or loads that could cause the employee to lose balance and fall.

Portable Ladder Safety Rules

Ladders must always be inspected before using or tagged out if defective. Inspection includes:

- Broken or damaged cleats or grippers.
- Rungs not tightly joined to the side rails.
- Broken or split side rails.
- Loose or damaged hinge spreaders.
- Angle brackets must not be broken.

Straight ladders will be equipped with cleats or grippers. When in use, the ladder will be lashed at the top and secured at the bottom whenever possible.

Ladders placed in doors or aisle ways of hazardous areas will be guarded by barricades or a watch person. Warning signs will be posted.

Straight ladders will be placed at the proper angle. The distance from the wall to the base of the ladder will be one fourth of the working length of the ladder.

Straight ladders used for accessing an upper landing surface will have the side rails of the ladder extended at least three feet above the landing.

Stepladders higher than ten feet will be secured or held by another person. Do not stand on the top step or cap of the ladder.

Anyone using the ladder must always face the ladder when ascending and descending, using both hands. All tools or equipment will be hauled up or down by the use of a hand line.

When on the ladder, persons must not overreach and must keep their belt buckle inside the side rails. Ladders will not be moved, shifted, or extended while occupied by anyone.

Employees will be trained in the proper use of ladders.

Ladders must not be spliced together to make them longer. Ladders must not be left unattended unless they are secured in place.

Grease, oil, and other debris must be removed from your hands and feet before climbing.

Only one person will be on a ladder at any given time.

Always clean and return ladders after use to the same storage area where they came from.

LIFTS 1926.453

Articulating boom lifts are to be operated by only trained and certified individuals. Fall protection (safety harnesses) will be worn during operations of the articulating boom lifts. "Deadman" safety switches will not be altered.

When using vertical lifts, such as hi-jacks or scissors lifts, fall protection is recommended but not mandated. Manufacturer safety recommendations will be followed while operating lift equipment.

Powered industrial trucks are to be operated by only trained and certified individuals.

Equipment will be inspected before each use. Equipment inspections will be documented on the provided company form.

LIQUIFIED PETROLEUM GAS (LPG) 1926.153

Each system will have containers, valves, connectors, manifold valve assemblies, and regulators of an approved type. Each container and vaporizer must be provided with one or more approved safety relief valves or devices. Containers will be placed upright on firm foundations or otherwise firmly secured.

Portable heaters must be equipped with an approved automatic device to shut off the flow of gas in event of flame failure. Storage of LPG within buildings is prohibited. Storage locations must have at least one approved portable fire extinguisher, rated not less than 20-B.C.

LOADING, UNLOADING, AND SECURING OF LOADS

When a truck has a load with a closed tailgate, it is necessary to secure the load or equipment for safe transportation. Small chock blocks typically work themselves loose due to the ride and weight transfer and should not be used.

Loads can be secured by using tie-down straps, chains, or rope. Also, make sure that the tailgate is properly latched before travel begins. Other safety practices to be performed:

- When climbing into or out of a truck bed, use both hands to hold on to the side of the rails or tailgate. Be sure to have a good footing. Maintain three-point contact with the side of the truck. Do not carry tools or other materials when climbing in or out of a truck.
- Never jump out of a truck bed; this practice can lead to sprains, twists or even broken bone injuries.
- Avoid throwing tools into the back of the truck. Keep track of all tools you are using and make sure they return to their proper storage area at the end of the day.
- Make sure not to bury tools under debris. Tools can become lost when unloading or dumping debris.

- If you must load a heavy object by hand, follow all safe lifting techniques. Whenever possible use tailgate lifts to load heavy equipment. Do not ride tailgates unless it is absolutely necessary to stabilize a load or piece of equipment.

PEDESTRIANS AND DRIVING SAFETY

Working trucks must frequently stop in high traffic areas to perform off-loading of material. This activity frequently requires our trucks to stop in lanes that carry traffic. If work is in these areas or ones with similar traffic patterns, you should set out florescent cones behind the truck to let people know the truck is stopped.

When driving a truck, the driver must exercise greater caution than when driving a car. Not only must all traffic laws be obeyed, but frequently the driver may need to drive slower than the actual speed limit. This is especially true if the truck is heavily loaded.

POTABLE WATER 1926.51

An adequate supply of potable water will be provided at all jobsites. Portable containers used to dispense drinking water will be capable of being tightly closed, labeled, and equipped with a tap. Water will not be dipped from containers.

Any container used to distribute drinking water will be clearly marked as to the nature of its contents and not used for any other purpose. Where single service cups (to be used but once) are supplied, both a sanitary container for the unused cups and a receptacle for disposing of the used cups will be provided.

POWER OPERATED HAND TOOLS 1926.302

Electric power operated tools will either be of the approved double-insulated type or grounded in accordance with the electrical standard (Subpart K).

Compressed air used for cleaning purposes may not exceed 30 psi, and then only in conjunction with effective chip guarding and personal protective equipment. Exceptions to 30 psi are allowed only for concrete form, mill scale, and similar cleaning operations. The use of compressed air to clean off yourself or other workers is not allowed.

Project Managers will provide necessary safety information for all tasks and equipment. Only trained and certified employees will be allowed to operate powder-actuated tools.

All powder actuated tools will be tested daily before use and all defects discovered before or during use will be corrected. All manufactured guards will remain in place. Powder actuated tools will not be loaded until immediately before use. Loaded tools will not be left unattended. Employees operating powder actuated tools must wear the proper personal protective equipment according to the personal protective equipment policy.

Secure pneumatic tools to hose in a positive manner to prevent accidental disconnection. Install and maintain safety clips or retainers on pneumatic impact tools to prevent attachments from being accidentally expelled. All hoses exceeding 1/2 inch inside diameter require safety devices at the source of supply to reduce pressure in case of hose failure.

If a tool is found to be defective, it will be tagged and taken out of service until the appropriate repairs are made.

PROTECTION OF THE PUBLIC

All company personnel are charged with aiding in the protection of the public including, as each job description dictates, installation and maintenance of signs, signals, lights, fences, guardrails, ramps, temporary sidewalks, barricades, overhead protection, etc. as may be necessary.

RECORDKEEPING 29 CFR 1904

The OSHA 300 Log is used for recording and classifying recordable occupational injuries and illnesses, and for noting the extent and outcome of each case.

The log shows when the occupational injury or illness occurred, to whom, what the injured or ill person's regular job was at the time of the injury or illness exposure, the department in which the person was employed, the kind of injury or illness, how much time was lost, and what the case resulted in.

The Safety Officer is responsible for the preparation and maintenance of the OSHA 300 Log.

RESPIRATORY PROTECTION 1926.103

Casey-Bertram employees will not normally be required to wear respirators. Jobs requiring respiratory protection will be performed by designated individuals who have been properly trained, medically evaluated, and fit tested. Because of our scope of work, employees will not normally be exposed to any situations requiring the use of a respirator. If a situation arises in which the use of respiratory protection is required, report it to your Safety Officer immediately.

SIGNS 1926.200

For the protection of all, warning signs such as "No Smoking," "Keep Out", "Eye Protection Required", "Out of Order-Do Not Use", and "Authorized Personnel" will be posted. All employees will obey these directions and aid in maintaining the signs.

STORAGE 1926.250

All materials stored in tiers will be secured to prevent sliding, failing, or collapse. Aisles and passageways will be kept clear and in good repair. Stored materials will not obstruct exits. Material stored in buildings under construction will not be placed within 6' of any hoist way or inside floor openings, nor within 10 feet of an exterior wall that does not extend above the top of the material stored. Materials will not be stored on scaffolds or runways in excess of supplies needed for immediate operations.

Section 4- Accident Investigation

Purpose

To ensure proper documentation of accidents, injuries, and near misses and to determine contributing factors with corrective actions, which will lead to the prevention of future incidents.

This policy is applicable to all Casey-Bertram employees. An investigation will be performed on any accident or incident involving the following:

- Recordable Occupational Injury or Illness
- Medical Expense
- Property Damage
- Near Miss

References

29 CFR 1910.04 – Recording and Reporting Occupational Injuries and Illnesses

Definitions

Reportable Accident - Any accident that incurs a medical or property expense.

Near Miss Incident - Occurrence that could have resulted in an OSHA Recordable Injury, or property damage.

Recordable Accident - Any occupational death, or nonfatal occupational illness or injury which involves one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (other than first aid).

Lost Time - Amount of time the employee is unable to perform his/her normal job duties over a normal work shift, even though the employee may be able to continue working, but not including the initial day of injury or onset of illness, and not including days the employee would not have worked even though able to work (holidays, vacations, etc.).

Reporting Procedures

- An employee must notify his/her Project Manager as soon as possible after the incident occurs.
- Injuries and Illnesses where three or more employees are hospitalized, or a death occurs; OSHA requires notification within 8 hours. The notification will be the Safety Officer's responsibility. (IOSHA's phone # 317-232-0055)
- Project Managers will be responsible for conducting accident investigation interviews with employees and witnesses that were involved in the incident.
- The Accident Investigation forms will be used for all written reports of investigation.
- These completed forms will be submitted to the Safety Officer within 24 hours following the accident.
- All accident reports will be reviewed by the President and Safety Officer.

Accident Investigation Procedures

The investigation will be made as soon as possible after an incident. The report will be completed and submitted to the persons listed below within 24 hours after the incident occurs. The report will include the basic cause of the incident, as well as the corrective action taken to prevent a future similar incident.

The Accident Investigation and Employer First Report of Injury/Illness forms will indicate exactly what caused the accident and describe the type of corrective action taken.

A copy of the investigation report is to be sent to:

- President
- Safety Officer

An Employee/Witness Accident Statement is to be completed by the injured employee and any witnesses. These forms will be submitted to their Project Manager and then forwarded to the President within 24 hours of the accident.

After the persons listed above have reviewed the investigation report, a brief description of the incident and the corrective actions taken to avoid a similar incident will be communicated to all employees during Casey-Bertram Toolbox Talks.

All documentation is forwarded to management to conduct an accident analysis.

Section 5- Bloodborne Pathogens

Purpose

To reduce the risk of exposure to bloodborne pathogens by all employees, including those who perform first aid and/or CPR.

Definitions

Occupational Exposure - Reasonably anticipated skin, eye, mucous membrane, or parenteral (needle stick, puncture) contact with blood or other potentially infectious materials that may result from the performance of an employee's duties. This regulation was initially written to protect workers in the emergency response and health care profession. OSHA has found an application in the construction industry. According to OSHA those individuals assigned with the responsibility of administering first aid on the job site are occupationally exposed or have the potential of being exposed to human blood and body fluid.

Bloodborne Pathogens - Pathogenic micro-organisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Contaminated Sharps - Any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

Decontamination - The use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Engineering Controls - Controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazard from the workplace.

Exposure Incident - A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

Hand washing Facilities - A facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

HBV - Hepatitis B virus.

HIV - Human immunodeficiency virus.

Occupational Exposure - Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Parenteral - Piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.

Personal Protective Equipment - Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

Regulated Waste - Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state.

Compressed - Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

Source Individual - Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee.

Universal Precautions - An approach to infection control. All human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

Procedures

It is inevitable that some employees may encounter blood or some other body fluid in the workplace. The following control measures will be utilized when body fluid is encountered on the jobsite:

- Barricade, mark, or section off any area that contains spilled blood or body fluid until it can be cleaned and decontaminated. Employees registered in First Aid/CPR should clean up the spill as soon as possible before returning to regular duties.

Only first aid/CPR-trained personnel are considered qualified to provide care to the injured party and must wear the appropriate personal protective equipment. Personal protective equipment includes:

- Disposable gloves
- Eye protection
- One way resuscitation device (used to restore breathing)

All of the above equipment will be considered part of the first aid kit.

All body fluids will be considered contaminated and will be cleaned up and disposed of properly. The following procedures will be used for cleaning and removal of body fluids:

- Personal protective equipment as described above will be worn during the operation.
- Puncture resistant containers will be used to store the contaminated material.
- Containers will be labeled as contaminated, using the Orange Biohazard symbol.
- Containers will be taken to a servicing facility such as a hospital or clinic, for proper disposal.

Casey-Bertram makes available, at no cost to the first aid/CPR trained employee, a Hepatitis B Vaccination. This employee is not required to have the vaccination, but if he/she refuses the vaccination, he/she must sign the declination form. This form will be kept in the employee's personnel file in the Corporate Office. The vaccination will be available at no cost to the employee at a future date if he/she decides to have it.

For the safety and well-being of our employees, Casey-Bertram has made it mandatory that those employees who have been exposed to body fluids must see the designated clinic for a follow-up evaluation and possibly laboratory tests. Upon evaluation, the Doctor may recommend that the employee have the Hepatitis B vaccination. This recommendation will be followed, and the employee will be required to have the vaccination.

When dealing with body fluids of any kind, it should be considered contaminated. A contaminated material is hazardous and will be labeled as such, placing the Orange Biohazard symbol on the container containing fluid.

Casey-Bertram will keep records on those employees who have been exposed to body fluids for up to 30 years after employment is discontinued.

Casey-Bertram will provide instruction to first aid/CPR certified employees in the proper methods of reducing the risk of exposure.

Training

This policy will be reviewed during New Hire Orientation.

Section 6- Designated Health Care Facility

Purpose

To provide prompt quality medical services and to establish procedures for returning employees with job-related injuries or illnesses to work by providing Restricted Duty job assignments when necessary.

Definitions

Designated Clinic – The nearest occupational health clinic has been selected by Casey-Bertram to treat all non-life threatening work related injuries.

Restricted Duty - An assignment provided to an employee who, because of a job-related injury or illness, is physically or mentally unable to perform all or any part of his/her normal assignment during all or any part of the normal workday or shift.

Procedures

For accidents resulting in injuries that require emergency transport, the injured employee should be taken to the nearest emergency room facility.

For injuries not requiring emergency transport, the Safety Officer after being notified of an injury, will select and contact the nearest preferred Occupational facility for treatment of the injured employee. The selection of this facility and future designated clinics will be based on the following:

- The doctor's experience in treating occupational injuries;
- The doctor's attitude in recommending light duty work assignments and;
- The doctor's familiarity of Indiana workmen's compensation laws.

Casey-Bertram's policy is to return employees to work as soon as possible after a job-related injury or illness has occurred. All possible opportunities will be considered to provide Restricted Duty Assignments for these employees. Restricted Duty Assignments will also be considered for employees injured off the job whenever possible.

By returning to work, employees are able to maintain their normal income while recovering from an injury or illness. Returning employees to work as soon as possible also benefits Casey-Bertram by keeping claims to a minimum and maintaining productivity by keeping the qualified individual on the job rather than retraining a replacement worker.

When an injured employee returns to work, all physical and mental limitations must be evaluated so that additional injury or aggravation does not occur. The safety of other employees working with the injured individual must also be considered.

Evaluation

All injuries and illnesses will be evaluated on case-by-case basis by the physician, with consultation by company representatives regarding light duty work that is available for the injured employee. The evaluation should consider the following items:

- Can the employee perform a useful task for Casey-Bertram?
- Does the assignment risk further injury or aggravation?
- Will the assignment compromise the safety of other employees?

Injured employees may return to work on Restricted Duty under the following circumstances:

- The employee's attending physician has determined the physical restrictions.
- Casey-Bertram has a task that can be assigned that meets the restrictions.
- Casey-Bertram's Project Managers are informed of the restrictions.
- No employee on Restricted Duty will be allowed to work more than (40) hours per week.

The employee must receive full medical release from a physician before resuming normal work activities.

Medical facility information will be posted at each jobsite.

Section 7- Disciplinary Procedures

Purpose

To provide a fair and consistent method for ensuring compliance with rules concerning operation, personnel, safety, security, and other regulations adopted by Casey-Bertram.

Scope

This policy will apply to all employees of Casey-Bertram.

Definitions

Safety Violation - Any unsafe act or condition that could lead to an accident, injury or property loss; and that could have reasonably been anticipated.

Procedures

Project Managers are authorized to enforce or administer the disciplinary policy. The Safety Officer will make the final determination of the degree of disciplinary action taken for violations of a rule or regulation.

The Project Manager will determine the degree of seriousness of the violation as follows:

- First Degree - Non-Serious Violation: A safety violation that has a direct relationship to jobsite safety and health, but in all probability, would not cause death or serious physical harm.
- Second Degree - Serious Violation: A violation that has been addressed verbally and not corrected in a reasonable period of time or could reasonably result in death or serious physical harm.
- Third Degree - Intentional Violation: A serious violation that is intentionally and knowingly committed, repeated without any effort to eliminate the unsafe condition, or is immediately dangerous to health.

The Project Manager will determine the degree of discipline as follows:

- First Degree - Non-Serious Violation. Penalty: Verbal Warning. The Project Manager should log this warning and advise the Safety Officer of its occurrence. The record of this occurrence will be placed in the violator's personnel file.
- Second Degree - Serious Violation. Penalty: Written Warning. The Project Manager and the violator will sign the written warning, and it will be placed in the violator's personnel file. (See Individual Disciplinary Notice D-5)
- Third Degree - Intentional Violation. Penalty: Up to three (3) days of suspension with written notice for an employee, and suspension from work. The Project Manager and the violator will sign the notice, and it will be placed in the violator's personnel file.

In addition to the above procedure, Casey-Bertram reserves the right to immediately terminate a person for violating safety and health policies.

Section 8- Emergency Action Plan

Purpose

To ensure the safety and well being of all employees in the event of a natural or man-made emergency or disaster.

References

1910.38 – Employee Emergency Plans and Fire Prevention Plans

Definitions

Emergency - Any serious, unexpected situation or occurrence that demands immediate action in order to protect the life of an employee, falls under scrutiny by the government or media, jeopardizes our public image, or threatens our financial or legal condition. Emergencies covered under this plan include:

- Major accidents
- Employee deaths from accidents
- Serious injuries
- Natural disasters, such as tornadoes, floods, earthquakes, etc.
- Man-made disasters, such as fires, explosions, workplace violence, chemical spills, toxic gas releases, etc.

Emergency Response Plan (ERP) - Written and posted documents as described on the Emergency Response Plan Checklist

Procedures

EAP procedures and equipment are developed prior to the start of a project.

An Emergency Action Plan contains requirements to protect all employees from the hazards associated with emergencies on projects that are continuously staffed for more than 3 months. Normally, Casey-Bertram projects will not fall under these guidelines. In the event of an emergency, all employees will rally at the company vehicle (or a pre-determined, project-specific rally point) until an all clear is given by the Project Manager.

Emergency agencies will be contacted via 911.

Complete the Emergency Response Plan Checklist as needed.

Who to Call

All employees of Casey-Bertram must know exactly who to call in the event of an emergency. The ERP will include a list of the following:

- Designated, On-site Leader of the Emergency
- President
- All Local Emergency Response Teams

Site Access

The plan will include a means of access and exit for the emergency agencies. The following items must be made known to all emergency teams:

- Map of the site showing path to be taken through the jobsite.

- A means to ensure the emergency team stays on this path. A suggestion would be to assign a number of people to stand at intervals, holding up a flag, to identify the path to be taken.
- Who the lead person(s) is (are) on-site.
- What the means of communication will be.

Site Evacuation

The plan will include an evacuation procedure (if the existing building does not already have one posted) including the following:

- Illustrated evacuation route, floor plans or workplace maps clearly showing the emergency escape route, along with safe refuge areas.
- A means of communicating the order.
- A means of accounting for personnel.

Evacuating Employees:

- Employees are to proceed to the emergency assembly area using the safest and fastest evacuation routes.
- Employees are to meet in designated area according to the type of emergency.
- Employees **ARE NOT** to return to the building or the area of the emergency.

Office employees are required to follow the detailed EAP procedures for the office. See Appendix A.

Responsibilities

The Safety Officer, with input from the Safety Committee, is responsible for the development, implementation, and review of the Emergency Response Plan Policy.

- Foremen and Operations Managers share the responsibilities in the development of the jobsite Emergency Response Plan, using this policy as a general guideline. These responsibilities include the following:
 - Completing the ERP prior to the start of the project.
 - Reviewing the job-specific plan with all jobsite employees, subcontractors, and client/ customer representatives.
 - Taking appropriate action to minimize hazardous situations and exposures to Casey-Bertram employees and subcontracted personnel.
 - Ensuring that outside emergency services (medical aid and local fire departments are called when necessary).
 - Posting the ERP where all employees, suppliers, and subcontractors can see and read its provisions.
 - Updating the ERP as required during the course of the project.
- All subcontractors will comply with Casey-Bertram's provisions of the jobsite Emergency Response Plan.

Section 9- Fall Protection

Purpose

To protect Casey-Bertram's employees and subcontractors from the hazards of falls from elevated areas.

Scope

This policy applies to floor, roof, or wall openings and have been written to prevent the possibility or danger of personnel or materials falling through these openings.

Definitions

Anchorage - A secure point of attachment for lifelines, lanyards or deceleration devices.

Body Harness - Straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.

Controlled Access Zone (CAZ) - An area in which certain work (i.e., overhand bricklaying) may take place without the use of guardrail systems, personal fall arrest systems, or safety net systems and access to the zone is controlled.

Deceleration Device - Any mechanism, such as a rope grab, rip-stitch lanyard, specially-woven lanyard, tearing or deforming lanyards, automatic self retracting lifelines/lanyards, etc., which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on an employee during fall arrest.

Guardrail System - A barrier erected to prevent employees from falling lower levels.

Handrail - Single bar on brackets attached on a wall, ramp or stairway, used to prevent tripping.

Hole - A gap or void 2 inches (5.1cm) or more in its least dimension, in a floor, roof, or other walking/working surface.

Lanyard - A flexible line of rope, wire, or strap which generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline, or anchorage.

Leading Edge - The edge of a floor, roof, or formwork for a floor or other walking/working surface (such as the deck) which changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed. A leading edge is considered to be an "unprotected side and edge" during periods when it is not actively and continuously under construction.

Lifeline - A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Low Slope Roof - A roof having a slope less than or equal to 4 in 12 (vertical to horizontal).

Lower Levels - Those areas or surfaces to which an employee can fall. Such areas or surfaces include, but are not limited to, ground levels, floors, platforms, ramps, runways, excavations, pits, tanks, material, water, equipment, structures, or portions thereof.

Opening - A gap or void 30 inches (76 cm) or more high and 18 inches (48 cm) or more wide, in a wall or partition, through which employees can fall to a lower level.

Personal Fall Arrest System - A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body belt or body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these. As of January 1, 1998, the use of a body belt for fall arrest is prohibited.

Rope Grab - A deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking, or both.

Roof - The exterior surface on the top of a building. This does not include floors or formwork which, because a building has not been completed, temporarily becomes the top surface of a building.

Roofing Work - The hoisting, storage, application, and removal of roofing materials and equipment, including related insulation, sheet metal, and vapor barrier work, but not including the construction of the roof deck.

Safety Monitoring System - A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards.

Standard Railing - Vertical barrier to protect and prevent persons from falling into, through or from wall openings, ramps, platform or other areas where a fall hazard exists.

Steep Roof - A roof having a slope greater than 4 in 12 (vertical to horizontal).

Toeboard - A low protective barrier that will prevent the fall of materials and equipment to lower levels and provide protection from falls for personnel.

Unprotected Sides and Edges - Any side or edge (except at entrances to points of access) of a walking/working surface, (i.e., floor, roof, ramp, or runway where there is no wall or guardrail system at least 39 inches [1.0 m] high.)

Walking/Working Surfaces - Any surface, whether horizontal or vertical on which an employee walks or works, including, but not limited to, floors, roofs, ramps, bridges, runways, formwork and concrete reinforcing steel but not including ladders, vehicles, or trailers, on which employees must be located in order to perform their job duties.

Warning Line System - A barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge, and which designates an area in which roofing work may take place without the use of a guardrail, body belt, or safety net systems to protect employees in the area.

Work Area - That portion of a walking/working surface where job duties are being performed.

Responsibilities

The Safety Officer will ensure that all Project Managers are trained and educated on the company fall protection policy and procedures.

Project Managers must instruct personnel in the use of fall protection equipment and procedures. Project Managers will consult with the Safety Officer to determine if the project has an adequate fall protection plan.

All employees are required to follow safe work practices related to fall protection.

Project Managers must evaluate and control the worksite hazards associated with floor, roof, and floor openings and must instruct workers to avoid exposure to the hazards and/or provide the physical means to prevent such exposures.

The employer will provide for prompt rescue of employees in the event of a fall or will assure that employees are able to rescue themselves.

Procedures

Pre Project Planning - A systematic evaluation of the building structure, openings and skylights, and fall exposures must be made prior to construction or demolition operations. Pre project planning for safety is best performed in conjunction with the safety department, the project management team, and other appropriate experts. A written site-specific fall prevention plan may be appropriate for particularly hazardous projects.

▪ *Compliance with Fall Protection Requirements*

- Generally, fall protection for workers is required whenever there is a potential for fall exposure of six (6) feet or more. Existing regulations allow alternative systems to protect workers from fall-related accidents.
- Project Managers should implement the most suitable form of fall protection system for each project, task, and employee. Decisions and actions required to implement fall protection must occur prior to operations.
- The following are examples of each of the seven (7) types of fall protection systems that must be used when workers are working at or above six (6) foot elevations:

▪ *Guardrail Systems (1)*

- The top edge of the guardrail will be 42 inches (+/-3 inches) above the walking/working level. Midrails will be installed between the top edge of the guardrail system and the walking/working surface.
- Midrails will be installed at a height halfway between the top edge of the guardrail system and the walking/working surface.
- Guardrail systems will be capable of withstanding, without failure, a force of at least 200 pounds in any outward or downward direction at any point along the top edge.
- When the 200 pound test load is applied in a downward direction, the top edge of the guardrail will not deflect to a height less than 39 inches above the walking/working level. Guardrail system components selected and constructed will be deemed to meet this requirement.

- Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members will be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point along the midrail or other member.
 - Guardrail systems will be so surfaced as to prevent injury to an employee from punctures or lacerations and to prevent snagging of clothing.
 - If wire rope is used for top rails, it will be flagged at not more than 6-foot intervals with high-visibility material.
 - When guardrail systems are used at hoisting areas, a chain, gate or removable guardrail section will be placed across the access opening between guardrail sections when hoisting operations are not taking place.
 - When guardrail systems are used at holes, they will be erected on all unprotected sides or edges of the hole.
 - When guardrail systems are used around holes used for the passage of materials, the hole will have not more than two sides provided with removable guardrail sections to allow the passage of materials. When the hole is not in use, it will be closed over with a cover, or a guardrail system will be provided along all unprotected sides or edges.
 - When guardrail systems are used around holes which are used as points of access (such as ladderways), they will be provided with a gate or be so offset that a person cannot walk directly into the hole.
 - Guardrail systems used on ramps and runways will be erected along each unprotected side or edge.
 - Manila, plastic or synthetic rope being used for top rails or midrails will be inspected as frequently as necessary to ensure that it continues to meet the strength requirements of 200 pounds and 150 pounds.
- ***Personal Fall Arrest Systems (2)***
 - Personal fall arrest systems and their use will comply with the provisions set forth below. Effective January 1, 1998, body belts are not acceptable as part of a personal fall arrest system. NOTE: The use of a body belt in a positioning device system is acceptable.
 - Connectors will be drop forged, pressed or formed steel, or made of equivalent materials.
 - Connectors will have a corrosion-resistant finish, and all surfaces and edges will be smooth to prevent damage to interfacing parts of the system.
 - D rings and snaphooks will be proof-tested to a minimum tensile load of 3,600 pounds without cracking, breaking, or taking permanent deformation.

- Snaphooks will be sized to be compatible with the member to which they are connected to prevent unintentional disengagement of the snaphook by depression of the snaphook keeper by the connected member. Snaphooks can also be a locking type snaphook designed and used to prevent disengagement of the snaphook by the contact of the snaphook keeper by the connected member. Effective January 1, 1998, only locking type snaphooks will be used.
- Unless the snaphook is a locking type and designed for the following connections, snaphooks will not be engaged as follows:
 - Directly to webbing, rope or wire rope;
 - To each other;
 - To a D ring to which another snaphook or other connector is attached;
 - To a horizontal lifeline; or
 - to any object which is incompatibly shaped or dimensioned in relation to the snaphook such that unintentional disengagement could occur by the connected object being able to depress the snaphook keeper and release itself.
- On suspended scaffolds or similar work platforms with horizontal lifelines which may become vertical lifelines, the devices used to connect to a horizontal lifeline will be capable of locking in both directions on the lifeline.
- Horizontal lifelines will be designed, installed, and used, under the supervision of a qualified person, as part of a complete personal fall arrest system, which maintains a safety factor of at least two.
- Lanyards and vertical lifelines will have a minimum breaking strength of 5,000 pounds.
- When vertical lifelines are used, each employee will be attached to a separate lifeline.
- Lifelines will be protected against being cut or abraded.
- Self-retracting lifelines and lanyards which automatically limit free fall distance to 2 feet or less will be capable of sustaining a minimum tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
- Self-retracting lifelines and lanyards which do not limit free fall distance to 2 feet or less, ripstitch lanyards, and tearing and deforming lanyards will be capable of sustaining a minimum tensile load of 5,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
- Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body belts and body harnesses will be made from synthetic fibers.
- Anchorages used for attachment of personal fall arrest equipment will be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached, or will be designed, installed, and used as follows:
 - As part of a complete personal fall arrest system which maintains a safety factor of at least two; and

- Under the supervision of a qualified person.
 - Personal fall arrest systems, when stopping a fall will:
 - limit maximum arresting force on an employee to 900 pounds when used with a body belt;
 - limit maximum arresting force on an employee to 1,800 pounds when used with a body harness;
 - be rigged such that an employee can neither free fall more than 6 feet, nor contact any lower level;
 - bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet; and,
 - have sufficient strength to withstand twice the potential impact energy of an employee free falling a distance of 6 feet or the free fall distance permitted by the system, whichever is less.
 - The attachment point of the body belt will be located in the center of the wearer's back. The attachment point of the body harness will be located in the center of the wearer's back near shoulder level, or above the wearer's head.
 - Body belts, harnesses, and components will be used only for employee protection (as part of a personal fall arrest system or positioning device system) and not to hoist materials.
 - Personal fall arrest systems and components subjected to impact loading will be immediately removed from service and will not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.
 - Personal fall arrest systems will be inspected prior to each use for wear, damage and other deterioration, and defective components will be removed from service.
 - Personal fall arrest systems will not be attached to guardrail systems, nor will they be attached to hoists.
 - When a personal fall arrest system is used at hoist areas, it will be rigged to allow the movement of the employee only as far as the edge of the walking/working surface.
- **Warning Line Systems (3)**
- The warning line will be erected around all sides of the roof work area.
 - When mechanical equipment is not being used, the warning line will be erected not less than 6 feet from the roof edge.
 - When mechanical equipment is being used, the warning line will be erected not less than 6 feet from the roof edge which is parallel to the direction of mechanical equipment operation, and not less than 10 feet from the roof edge which is perpendicular to the direction of mechanical equipment operation.
 - Points of access, materials handling areas, storage areas, and hoisting areas will be connected to the work area by an access path formed by two warning lines.

- When the path to a point of access is not in use, a rope, wire, chain, or other barricade, equivalent in strength and height to the warning line, will be placed across the path at the point where the path intersects the warning line erected around the work area, or the path will be offset such that a person cannot walk directly into the work area.
 - Warning lines will consist of ropes, wires, or chains and supporting stanchions erected as follows:
 - The rope, wire, or chain will be flagged at not more than 6-foot intervals with high-visibility material;
 - The rope, wire, or chain will be rigged and supported in such a way that its lowest point (including sag) is no less than 34 inches from the walking/working surface and its highest point is no more than 39 inches from the walking/working surface;
 - After being erected with the rope, wire, or chain attached, stanchions will be capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally against the stanchion, 30 inches above the walking/working surface, perpendicular to the warning line, and in the direction of the floor, roof, or platform edge;
 - The rope, wire, or chain will have a minimum tensile strength of 500 pounds and after being attached to the stanchions, will be capable of supporting, without breaking, the loads applied to the stanchions.
 - The line will be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.
 - Mechanical equipment on roofs will be used or stored only in areas where employees are protected by a warning line system, guardrail system, or personal fall arrest system.
- **Controlled Access Zones (4)**
- When used to control access to areas where leading edge and other operations are taking place, the controlled access zone will be defined by a control line or by any other means that restricts access.
 - When control lines are used, they will be erected not less than 6 feet nor more than 25 feet from the unprotected or leading edge, except when erecting precast concrete members.
 - When erecting precast concrete members, the control line will be erected not less than 6 feet nor more than 60 feet or half the length of the member being erected, whichever is less, from the leading edge.
 - The control line will extend along the entire length of the unprotected or leading edge and will be approximately parallel to the unprotected or leading edge.
 - When used to control access to areas where overhand bricklaying and related work are taking place:

- The controlled access zone will be defined by a control line erected not less than 10 feet (3.1 m) nor more than 15 feet from the working edge.
 - The control line will extend a distance sufficient for the controlled access zone to enclose all employees performing overhand bricklaying, or the related work at the working edge and will be approximately parallel to the working edge.
 - Additional control lines will be erected at each end to enclose the controlled access zone.
 - Only employees engaged in overhand bricklaying or related work will be permitted in the controlled access zone.
 - Control lines will consist of ropes, wires, tapes, or equivalent materials, and supporting stanchions as follows:
 - Each line will be flagged or otherwise clearly marked at not more than 6-foot (1.8 m) intervals with high-visibility material.
 - Each line will be rigged and supported in such a way that its lowest point (including sag) is not less than 39 inches from the walking/working surface and its highest point is not more than 45 inches (50 inches when overhand bricklaying operations are being performed) from the walking/working surface.
 - Each line will have a minimum breaking strength of 200 pounds.
 - On floors and roofs where guardrail systems are in place, but need to be removed to allow leading edge work to take place, only that portion of the guardrail necessary to accomplish that day's work will be removed.
- **Safety Monitoring Systems (5)**
- A competent person must be designated to monitor the safety of other employees and this safety monitor must comply with the following requirements:
 - The safety monitor will be competent to recognize fall hazards;
 - The safety monitor will warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner;
 - The safety monitor will be on the same walking/working surface and within visual sighting distance of the employee being monitored;
 - The safety monitor will be close enough to communicate orally with the employee; and
 - The safety monitor will not have other responsibilities which could take the monitor's attention from the monitoring function.
 - Other than an employee engaged in roofing work (on low-sloped roofs) or an employee covered by a fall protection plan, no employee will be allowed in an area where an employee is being protected by a safety monitoring system.

- Employees working in a controlled access zone will comply promptly with fall hazard warnings from the safety monitor.
- **Covers (6)**
 - Covers will 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.
 - Covers located in roadways and vehicular aisles will be capable of supporting, without failure, at least twice the maximum axle load of the largest vehicle expected to cross over the cover.
 - Covers will be secured when installed so as to prevent accidental displacement by the wind, equipment, or employees.
 - Covers will be color coded or they will be marked with the word "HOLE" or "COVER" to provide warning of the hazard. NOTE: This provision does not apply to cast iron manhole covers or steel grates used on streets or roadways.
- **Safety Net Systems(7)**
 - Safety nets shall be installed as close as practicable under the walking/working surface on which employees are working, but in no case more that 30 feet below such level.
 - Safety nets will be extended outward from the outermost projection of the work surface as follows:

Vertical distance from working level to horizontal plane of the net	Minimum required horizontal distance of outer edge of net from the edge of the working surface
Up to 5 feet	8 feet
More than 5 feet up to 10 feet	10 feet
More than 10 feet	13 feet

- Safety nets shall be installed with sufficient clearance under them to prevent contact with the surface or structures below when subject to an impact force equal to the drop test.
- Except as provided in paragraph 1926.502(c)(4)(ii), safety nets and safety net installations will be drop tested at the jobsite after initial installation and before being used as a fall protection system, whenever relocated, after major repair, and at 6-month intervals if left in one place. The drop test shall consist of a 400 pound bag of sand 30 +/- 2 inches in diameter dropped into the net from the highest walking/working surface.
- Safety nets will be inspected at least once a week for wear, damage, and other deterioration. Defective components will be removed from service.
- Materials, scrap pieces, equipment, and tools will be removed as soon as possible from the safety net and at least before the next work shift.

- The maximum size of each safety net mesh opening will not exceed 36 square inches and no longer than 6 inches on any side. The opening measured center-to-center of mesh ropes or webbing will not be longer than 6 inches. All mesh crossings will be secured to prevent enlargement of the mesh opening.
 - Each safety net will have a border rope for webbing with a minimum breaking strength of 5,000 pounds.
 - Connections between safety net panels shall be as strong as integral net components and will be spaced not more than 6 inches apart.
- **Floor Openings and Floor Holes**
 - Floor openings will be guarded by using a standard railing and toeboard.
 - Floor holes will be covered with material that is capable of supporting the maximum weight load intended.
 - Ladderways Floor Openings or Platforms
 - Ladderways will be guarded with standard railings and toeboards.
 - Platforms will be guarded with standard railings and toeboards.
 - Hatchways and Chute Floor Opening
 - Hatchways will be guarded with hinged cover and standard railings with only one exposed side. The hinged cover will be closed or side will be guarded with removable standard railings.
 - Chutes will be guarded with removable standard railings and toeboard on not more than two sides of the opening and a fixed standard railing and toeboard. All standard railings will be kept in place when the chute is not in use.
 - Skylights, Pits and Trap-Door Floor Opening
 - Skylights will be guarded with fixed standard railings on all sides.
 - Pits and trap-doors will be guarded with floor opening covers or standard railings on all exposed sides by removable standard railings.

Training Requirements

The Safety Officer or his/her designated representative (competent person) will provide training for each employee to recognize the hazards of falling as listed in the following procedures:

- The nature of fall hazards in the work area;
- The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used;
- The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used;
- The role of each employee in the safety monitoring system when this system is used;
- The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs;
- The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection;
- The role of employees in fall protection plans;
- The standards contained in the OSHA subpart.

Casey-Bertram will verify fall protection training by preparing a written certification record. The written certification record will contain the name of the employee trained, the date(s) of the training, and the signature of the person who conducted the training or the signature of the employer. This record will be kept on file in the office.

When the Safety Officer or Project Manager has reason to believe that any affected employee who has already been trained does not have the understanding and skill required, the Safety Officer or his designated competent person will retrain each such employee. Circumstances where retraining is required include, but are not limited to, situations where:

- Changes in the workplace render previous training obsolete; or
- Changes in the types of fall protection systems or equipment to be used render previous training obsolete; or
- Inadequacies in an employee's knowledge and/or use of fall protection systems or equipment indicate that the employee has not retained the requisite understanding or skill.

Project Managers will train workers in the avoidance of floor, roof, and wall opening hazards through the use of toolbox talks and daily work instructions.

Employees are required to self inspect all fall protection equipment prior to use.

Section 10- Hazard Communication (HAZCOM)

Purpose

To properly educate and protect employees from exposures to hazardous chemicals in the workplace.

Definitions

Chemical - Any element, chemical compound, or mixture of elements and/or compounds.

Container - 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.

Exposure or Exposed - 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.)

Flammable liquid - Any liquid having a flashpoint at or below 199.4°F. Flammable liquids are divided into four categories as follows:

Category 1 shall include liquids having flashpoints below 73.4°F and having a boiling point at or below 95°F.

Category 2 shall include liquids having flashpoints below 73.4°F and having a boiling point above 95°F.

Category 3 shall include liquids having flashpoints at or above 73.4°F and at or below 140 °F. When a Category 3 liquid with a flashpoint at or above 100°F is heated for use to within 30°F of its flashpoint, it shall be handled in accordance with the requirements for a Category 3 liquid with a flashpoint below 100°F.

Category 4 shall include liquids having flashpoints above 140°F and at or below 199.4°F. When a Category 4 flammable liquid is heated for use to within 30°F of its flashpoint, it shall be handled in accordance with the requirements for a Category 3 liquid with a flashpoint at or above 100°F.

Flash point - The minimum temperature at which a liquid gives off vapor within a test vessel in sufficient concentration to form an ignitable mixture with air near the surface of the liquid.

Globally Harmonized System - The Globally Harmonized System (GHS) is an international approach to hazard communication, providing agreed criteria for classification of chemical hazards, and a standardized approach to label elements and safety data sheets. It is based on major existing systems around the world, including OSHA's Hazard Communication Standard and the chemical classification and labeling systems of other US agencies.

Hazard Category - 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 - The nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

Hazard Not Otherwise Classified (HNOC) - 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).

Hazardous Chemical - Any chemical that is a physical or health hazard.

Hazard Statement - 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.

Health Hazard - 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 29CFR Appendix A to §1910.1200—Health Hazard Criteria.

Immediate Use - 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.

Label - 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 - The specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

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

Physical Hazard - 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.

Pictogram - 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 - 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 - 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.

Safety Data Sheet (SDS) - Written or printed information concerning a hazardous chemical.

Signal Word - 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.

Physical Hazard - 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.

Work Area - A room or defined space in a workplace where hazardous chemicals are produced or used and where employees are present.

Workplace - An establishment, jobsite, or project, at one geographical location containing one or more work areas.

Responsibilities

All containers of hazardous materials located at the workplace, and not previously labeled by the manufacturer, must be labeled.

The Safety Representative will maintain SDS binders at the main office, as well as the current HAZCOM written program.

The Project Managers will be responsible for ensuring that labeling practices are observed and complied with per the HAZCOM program requirements in the workplace as materials arrive (new and used).

Procedures

All Casey-Bertram employees shall be aware of the potentially hazardous materials use on its premises. These materials will be identified with warning labels and SDSs shall be kept for each.

To understand the potential dangers of chemicals, employees will follow these HAZCOM written program guidelines:

This program includes guidelines on identification of chemical hazards and the preparation and proper use of container labels, placards and other types of warning devices.

1. Chemical Inventory

Casey-Bertram maintains an inventory of all known chemicals in use on the worksite. A chemical inventory list is available from the Safety Representative.

Hazardous chemicals brought onto the worksite will be included on the hazardous chemical inventory list.

2. Container Labeling

All chemicals on site will be stored in their original or approved containers with a proper label attached, except small quantities for immediate use. A proper label is one that includes: product identifier, supplier identification, precautionary statements, hazard statements, signal word and hazard pictograms. Workplace/secondary labels with the NFPA 704 label or HMIS labeling may be used as well. Any containers not properly labeled should be given to the Safety Representative for proper handling.

Employees may dispense chemicals from original containers only in small quantities intended for immediate use. Any chemical left after work is completed must be returned to the original container or the Safety Director for proper handling.

All secondary containers must have the appropriate warning label.

Casey-Bertram will rely on manufacturer applied labels whenever possible, and will ensure that these labels are maintained. Containers that are not labeled, or from which the manufacturer's label has been removed, will be relabeled by the Safety Director or Project Manager. No unmarked containers of any size are to be left in the work area unattended.

Casey-Bertram will ensure that each container is labeled to identify any hazardous chemicals inside and any appropriate hazard warnings.

Non-English speaking employees will be provided information in their language.

As of June 1, 2015, OSHA's hazard communication standard will require pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

<p>Health Hazard</p>  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	<p>Flame</p>  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides 	<p>Exclamation Mark</p>  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) <ul style="list-style-type: none"> • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non Mandatory)
<p>Gas Cylinder</p>  <ul style="list-style-type: none"> • Gases under Pressure 	<p>Corrosion</p>  <ul style="list-style-type: none"> • Skin Corrosion/ burns • Eye Damage • Corrosive to Metals 	<p>Exploding Bomb</p>  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides
<p>Flame over Circle</p>  <ul style="list-style-type: none"> • Oxidizers 	<p>Environment *(Non Mandatory)</p>  <ul style="list-style-type: none"> • Aquatic Toxicity 	<p>Skull and Crossbones</p>  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic)

3. Safety Data Sheets (SDS)

Employees working with a hazardous chemical may request a copy of the Safety Data Sheet (SDS). Requests for SDSs should be made to the Safety Representative.

SDSs should be available, and standard chemical reference may also be available, on the site to provide immediate reference to chemical safety information. Employees will be made aware of the location of SDSs on the jobsite.

4. Employee Training

Employees will be trained to work safely with hazardous chemicals. Employee training will include:

- Methods that may be used to detect a release of hazardous chemicals in the work place,
- Physical and health hazards associated with chemicals,
- Protective measures to be taken,
- Safe work practices, emergency responses and use of personal protective equipment,

Information on the Hazard Communication Standard including:

- Labeling and warning systems, and
- An explanation of Safety Data Sheets.

5. Personal Protective Equipment (PPE)

Required PPE is available from the Project Manager. Any employee found in violation of PPE requirements may be subject to disciplinary actions up to and including discharge.

6. Emergency Response

Any incident of over exposure or spill of a hazardous chemical/substance must be reported to the Project Manager at once.

The Project Manager will ensure that proper emergency response actions are taken in leak/spill situations.

7. Hazards of Non-Routine Tasks

The Project Manager will inform employees of any special tasks that may arise which would involve possible exposure to hazardous chemicals.

Review of safe work procedures and use of required PPE will be conducted prior to the start of such tasks. Where necessary, areas will be posted to indicate the nature of the hazard involved.

8. Informing Other Employers

Other on-site employers are required to adhere to the provisions of the Hazard Communication Standard.

Information on hazardous chemicals known to be present will be exchanged with other employers. Employers will be responsible for providing necessary information to their employees.

Casey-Bertram written hazard communication program will be readily accessible to other on-site employers.

Section 11- Hearing Conservation Program

Purpose

To provide a hearing conservation/protection program for all Casey-Bertram employees.

Definitions

Decibels (dB)- This symbol is used for expressing the relative intensity of sounds. Zero (0) represents the average least perceptible sound to approximately 130 for the average pain threshold.

Time Weighted Average (TWA) - Averaged dB over 1 hour time period through the usage of a noise dosimeter.

Procedures

Audiometer testing by a licensed or certified audiologist, will be offered at least annually to all employees exposed to greater than 85 decibels on a (8) hour time weighted average (TWA).

Areas where daily noise exposures are likely to exceed the 85 decibels (TWA) will be posted with hearing protection required signs.

The safety officer will administer the Hearing Conservation Policy.

Hearing Protection Required

- Hearing protection required signs are to be posted at the entrance and throughout all areas that have been determined as capable of exposing employees to noise levels in excess of 85 decibels over an 8 hour time weighted average (TWA).
- Once a hearing protection required area has been established, all employees working or entering the area will be required to wear the appropriate hearing protection.

Types of Hearing Protection

- Suitable ear plugs, muffs, etc. will be readily available for employee usage. The Foreman will review the types of hearing protection that will be made available for all effected employees.
- In all cases where the sound levels exceed the TWA values shown below, a continuing effective Hearing Conservation Program (HCP) shall be administered.

Sound Pressure Level	Time Weighted Average (TWA)	Source or Effect of Noise
114-139	< = 1 Hour	Power actuated tools (such as those for setting fasteners into concrete).
114-118	< = 1 Hour	Hard rock drilling or usage of a jack hammer.
105-125	< = 1 Hour	Riveting tools used on metal plates.
98-100	2 Hours	Heavy truck cab.
95-105	1 Hour - 4 Hours	Crawler tractor.
95-102	1 Hour - 4 Hours	Front-end loaders.
90-120	< = 1 Hour - 8 Hours	Earth moving equipment.
90-115	< = 1 Hour - 8 Hours	Power shovel cab.
87-89	8 Hours	Diesel air compressor.
85-98	2 hours - 8 Hours	Graders.
65-105	1 Hour - 8 Hours	Welding equipment.

The HCP includes a baseline audiogram, which tests the current level of hearing for a particular employee. This baseline audiogram (which is quantifiable data) becomes a part of the employee's medical records. The HCP also includes follow up audiograms to determine if a loss of hearing has occurred, an audiometric testing program, employee notification, hearing protection requirements, training on the effects of noise to an employee's hearing and the use of Personal Protective Equipment (PPE).

Training Requirements

A training program shall be established for all employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels.

The training program shall be repeated annually for each employee included in the hearing conservation program. Information provided in the training program shall be updated to be consistent with changes in protective equipment and work processes.

Each employee shall be informed of the following:

- The effects of noise on hearing;
- The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care; and
- The purpose and results of audiometric testing, and an explanation of the test procedures.

Section 12- Heavy Mechanized Equipment

Purpose

To ensure the safe operation of heavy equipment on construction sites.

Scope

This policy will apply to all employees of Casey-Bertram.

Reference

1926 Subpart O

Definitions

Not applicable to this section.

Responsibilities

The safety officer must ensure employees are competent to operate heavy mechanized equipment.

Only trained and authorized operators are permitted to operate heavy equipment.

Equipment operators must perform a pre-operation check at the beginning of each shift.

Casey-Bertram employees must ensure the safe operations of heavy equipment.

Procedures

All vehicles must have:

- A service brake system, an emergency brake system, and a parking brake system
- Working headlights, tail lights, and brake lights
- An audible warning device (horn)
- Intact windshield with working windshield wipers

The use of cell phones are prohibited while operating equipment.

Equipment should be maintained in good working condition.

All mobile equipment must have a functional fire extinguisher on board mounted in a visible and easily accessible location and the extinguisher should be serviced on an annual basis by an outside fire extinguisher service contractor.

Heavy equipment must have a rollover protective structure.

Seatbelts must be worn at all times where rollover protection is provided.

Passengers are not permitted to ride on equipment unless designed by the manufacturer.

All cab glass shall be safety glass, or equivalent, that introduces no visible distortion affecting the safe operation of any machine

All vehicles shall be equipped with an adequate audible warning device at the operator's station and in an operable condition.

All vehicles in use shall be checked at the beginning of each shift to assure that the following parts, equipment, and accessories are in safe operating condition and free of apparent damage that could cause failure while in use: service brakes, including trailer brake connections; parking system (hand brake); emergency stopping system (brakes); tires; horn; steering mechanism; coupling devices; seat belts; operating controls; and safety devices. All defects shall be corrected before the vehicle is placed in service. These requirements also apply to equipment such as lights, reflectors, windshield wipers, defrosters, fire extinguishers, etc.

All bidirectional machines, such as rollers, compacters, front-end loaders, bulldozers, and similar equipment, shall be equipped with a horn, distinguishable from the surrounding noise level, which shall be operated as needed when the machine is moving in either direction. The horn shall be maintained in an operative condition.

No modifications or additions which affect the capacity or safe operation of the equipment shall be made without the manufacturer's written approval.

The heavy equipment should have canopy guards to help protect the operator from tree limbs and falling objects.

All equipment is parked and left unattended; the equipment shall be shut-off, parking park applied, and attachments (buckets, blades, etc.) lowered to the ground.

All equipment used in site clearing operations shall be equipped with rollover guards meeting the requirements of this subpart. In addition, rider-operated equipment shall be equipped with an overhead and rear canopy guard.

Employees working around heavy equipment shall wear high-visibility clothing, and stay in constant communication with the operator.

Training

Operators shall be trained prior to the operation of equipment.

New employees, previously trained by another company, shall be evaluated for competency to operate each piece of assigned equipment.

Section 13– Indiana OSHA Inspections

Purpose

To provide guidelines to facilitate a jobsite inspection by Indiana OSHA Representatives.

Scope

This policy applies to all Casey-Bertram offices and jobsites.

References

Indiana Code 22-8-1.1

Definitions

Indiana administers its own safety statute and standards through a state agency known as "IOSHA." Indiana is one of 23 states that have their own state program. State programs must be equal to or better than the Federal OSHA program. State programs must also adopt and enforce all standards promulgated at the federal level.

The following is a summary of Indiana's OSHA Act:

- **Effective Date:** The State of Indiana assumed administration and enforcement of occupational safety and health laws, regulations and standards on March 6, 1974. On that date, the Federal Occupational Safety and Health Administration (OSHA) approved an Indiana plan submitted in December of 1972.
- **Coverage and Description of IOSHA:** The Indiana Occupational Safety and Health Act (I.C. 22-8-1.1) covers all employers with one or more employees. IOSHA is a division within the Indiana Department of Labor. It consists of five units. The Bureau of Building and Factory Inspections (industrial); Construction Enforcement; Industrial Hygiene; Public Sector; and The Bureau of Safety, Education and Training, (BUSET).
- **IOSHA's address:** Indiana Department of Labor, Occupational Safety and Health Administration, 402 W. Wash. St. W195, Indianapolis, IN 46204-2287. IOSHA telephone number: (317) 232-0055.
- **Reporting:** It is a requirement to report any fatality and/or a catastrophe or the hospitalization of three or more people within 8 hours. To report, call IOSHA at (317) 232-0055. It is necessary to follow up with a letter and keep a file copy.
- **Posting:** (1) Put up state furnished or federal poster in a prominent place so employees can see it. (2) If you receive a citation as a result of an inspection, post the citation at or near the place of the alleged violation of the standard for at least three days or until the alleged violation has been corrected, whichever is greater.

Responsibilities

Casey-Bertram Management and the Safety Officer will be notified of an IOSHA inspection as soon as possible.

The Project Manager, or his designated representative, will escort the IOSHA Compliance Officer around the jobsite at all times and will follow the procedures outlined in this section.

Procedures

See IOSHA Inspection Checklist in Forms section.

Training Requirements

Project Managers will be trained in the procedures outlined above during New Hire Orientation.

Section 14– Ladders

Purpose

Procedures for the construction use and inspection of stairways and ladders at the jobsite.

Scope

This section applies to all Casey-Bertram employees and subcontractors that use ladders at our jobsites.

Definitions

Cleat - A ladder crosspiece of rectangular cross section placed on edge upon which a person may step while ascending or descending a ladder.

Double-Cleat Ladder - A ladder similar in construction to a single-cleat ladder, but with a center rail to allow simultaneous two-way traffic for employees ascending or descending.

Equivalent - Alternative designs, materials, or methods that the employer can demonstrate will provide an equal or greater degree of safety for employees than the method or item specified in the standard.

Failure - Load refusal, breakage or separation of component parts. Load refusal is the point where the structural members lose their ability to carry the loads.

Fixed-Ladder - A ladder that cannot be readily moved or carried because it is an integral part of a building or structure. A side-step fixed ladder is a fixed ladder that requires a person getting off at the top to step to the side of the ladder side rails to reach the landing. A through fixed ladder is a fixed ladder that requires a person getting off at the top to step between the side rails of the ladder to reach the landing.

Individual-Rung/Step Ladders - Ladders without a side rail or center rail support. Such ladders are made by mounting individual steps or rungs directly to the side or wall of the structure.

Job-Made Ladder - A ladder that is fabricated by employees, typically at the construction site, and is not commercially manufactured. This definition does not apply to any individual-rung/step ladders.

Ladder Stand - A mobile fixed size self-supporting ladder consisting of a wide flat tread ladder in the form of stairs. The assembly may include handrails.

Maximum Intended Load - The total load of all employees, equipment, tools, materials, transmitted loads, and other loads anticipated to be applied to a ladder component at any one time.

Nosing - That portion of a tread projecting beyond the face of the riser immediately below.

Riser Height - The vertical distance from the top of a tread to the top of the next higher tread or platform/landing or the distance from the top of a platform/landing to the top of the next higher tread or platform/landing.

Side-Step Fixed Ladder - See definition above on "Fixed Ladder."

Single-Cleat Ladder - A ladder consisting of a pair of side rails, connected together by cleats, rungs, or steps.

Single-Rail Ladder - A portable ladder with rungs, cleats, or steps mounted on a single rail instead of the normal two rails used on most other ladders.

Stairrail System - A vertical barrier erected along the unprotected sides and edges of a stairway to prevent employees from falling to lower levels. The top surface of a stairrail system may also be a "handrail".

Step Stool (Ladder Type) - A self-supporting, foldable, portable ladder, nonadjustable in length, 32 inches or less in overall size, with flat steps and without a pail shelf, designed to be climbed on the ladder top cap as well as all steps. The side rails may continue above the top cap.

Unprotected Sides and Edges - Any side or edge (except at entrances to points of access) of a stairway where there is no stair rail system or wall 36 inches (.9 m) or more in height, and any side or edge (except at entrances to points of access) of a stairway landing, or ladder platform where there is not wall or guardrail system 39 inches (1 m) or more in height.

Responsibilities

Casey-Bertram's Safety Representative is responsible for ensuring their workers use ladders according to the rules and procedures described in this section.

All stairways and ladders shall be inspected daily by a competent person.

Procedures

Ladders shall be inspected by a competent person for visible defects on a weekly basis, and after any occurrence that could affect their safe use. The inspection includes but is not limited to the following:

- Cracked or missing cleats.
- Cracked side rails.
- Decaying and rotted wood.
- Installation of rubber feet.
- Nonconductive.
- Slope requirements.
- Handrail requirements.
- Landing requirements.
- Construction requirements.
- Tie-off requirements.
- 3 foot extension requirements.

When transporting, ladders should be carried in the horizontal position to avoid contact with overhead electrical conductors.

If a stairway or ladder does not pass the weekly inspection, it should be removed until the necessary repairs can be made. If for some reason the stairway or ladder cannot be removed, it must be "TAGGED-OUT" of service until the necessary repairs can be made. **DO NOT USE AN UNSAFE STAIRWAY OR LADDER!!**

A stairway or ladder shall be provided at all personnel points of access when there is a break in elevation of 19" or more to gain access to different levels of the building structure, and no ramp, runway, sloped embankment, or personnel hoist is provided.

- Each ladder shall be capable of supporting 4 times its maximum intended load.
- Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced.
- Ladder components shall be surfaced so as to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.

Ladder side rails shall extend 3 feet above the landing surface to which the ladder is used to gain access, or when such an extension is not possible the ladder shall be secured from movement at its top to a rigid support that will not deflect, a grasping device, such as a grabrail, shall be provided to assist employees in mounting and dismounting the ladder.

- Ladders shall be maintained free of oil, grease, and other slipping hazards.
- Ladders shall only be used on level stable surfaces, unless secured to prevent accidental displacement.
- Ladders placed in passageways, doorways, or driveways shall be completely secured, or the area shall be completely barricaded to keep activities away from the ladder.

The areas around the top and base of the ladder shall be kept clear.

- Ladders shall not be moved, shifted, or extended while occupied.
- The top or top step shall not be used for a step on a step ladder.
- Ladders with defects **SHALL BE PLAINLY MARKED - "DO NOT USE" AND REMOVE FROM SERVICE.**
- Employees shall use at least one hand to grasp the ladder when ascending or descending
- Employees shall not carry any objects or loads that could cause the employee to lose balance and fall.

Portable Ladder Safety Rules

Always inspect ladders before using, or tag out defective ladders. Inspect for the following:

- Broken or damaged cleats or grippers.
- Rungs not tightly joined to the side rails.
- Broken or split side rails.
- Loose or damaged hinge spreaders.
- Angle brackets must not be broken.

Straight ladders will be equipped with cleats or grippers. When in use, the ladder will be lashed at the top and secured at the bottom whenever possible.

Ladders placed in doors or aisle ways of hazardous areas shall be guarded by barricades or a watch person. Warning signs will be posted.

Straight ladders will be placed at the proper angle. The distance from the wall to the base of the ladder will be one fourth of the working length of the ladder.

Straight ladders used for accessing an upper landing surface will have the side rails of the ladder extended at least three feet above the landing.

Stepladders higher than ten feet will be secured or held by another person. Do not stand on the top step or cap of the ladder.

Always face the ladder when ascending and descending. Use both hands. All tools or equipment will be hauled up or down by the use of a hand line.

Do not overreach and always keep your belt buckle inside the side rails. Ladders will not be moved, shifted, or extended while occupied by anyone.

Ladders must not be used as scaffolding.

Do not splice ladders together to make them longer.

Do not leave ladders unattended unless they are secured in place.

Remove grease, oil, and other debris from your hands and feet before climbing.

Only one person shall be on a ladder at any given time.

Always clean and return ladders after use to the same storage area where they came from.

Double-Cleated Ladders

Shall be used when a ladder is the only means of access or egress from a working area for 25 or more employees, or when the ladder is to serve simultaneous two-way traffic.

Stairways

Shall be used whenever the horizontal distance is more than a quarter of the vertical distance (working distance).

Spiral Stairways

Shall never be used unless it is or will become a permanent part of the structure.

If metal pan stairs are to be used during construction, the pans shall be fitted with wood.

All parts of stairways and ladders shall be free of hazardous projections. **NEVER USE DOUBLE-HEADED NAILS FOR THE CONSTRUCTION OF STAIRWAYS, LADDERS, HANDRAILS, BARRICADES, ETC.**

Slippery conditions such as ice, snow, grease or oil shall be corrected prior to using ladders or stairways. NO EXCEPTIONS.

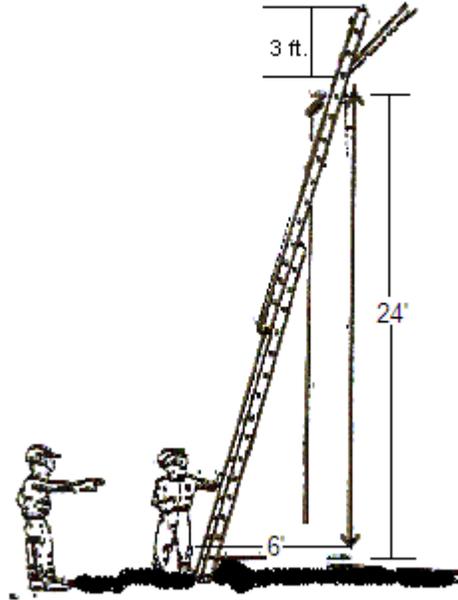
Training Requirements

All new employees must be trained on ladder safety during their employee orientation. Existing employees shall be re-trained annually or as needed in the following areas:

- The nature of fall hazards in the work area.

- The correct procedures for erecting, maintaining, and disassembling the Fall Protection System to be used.
- The proper construction, placement, and care in handling of all ladders and stairways.
- The maximum intended load carrying capacities of ladders used.

The Subcontractor Safety Representative shall ensure that each employee has been trained by a Competent Person in the above mentioned training requirements.



Section 15- Machine Guarding

Purpose

To protect employees from potential hazards from moving parts associated with machinery.

Scope

This policy applies to Casey-Bertram employees while in the field or shop areas.

Responsibilities

Casey-Bertram employees will leave guards in place during the operation of equipment. Employees will immediately report missing guards to the Project Manager.

Only authorized and trained Casey-Bertram employees will operate motorized equipment.

Procedures

Control of dust exposure may be accomplished by equipping portable tools with low-volume, high-velocity exhaust systems or utilizing wind conditions to remove dust from the work area.

Any hose and hose connections used for conducting compressed air to utilization equipment must be designed for the pressure and service to which they are subjected.

Section 16- Motor Vehicles

Purpose

To establish policies and procedures for all Casey-Bertram employees who operate company vehicles.

Requirements

General Driving

- All state and local traffic laws will be obeyed. Driving too fast for conditions such as poor highway, poor visibility, icy roads, and highway congestion are the cause of the majority of accidents. Drivers should use good judgment and adjust driving according to road conditions.
- Reckless driving will not be tolerated. Defensive driving and the use of seat belts are required. Employees should take pride in the appearance of the Company vehicles they drive.

Operation of Company Vehicles

- Company vehicles will be used only by authorized employees for authorized business reasons. Written authorization for any deviation must be obtained from the President of the Company. Employees whose driving records reflect irresponsibility and are not acceptable to our insurance carrier will not be permitted to operate Company vehicles.

Condition of Company Vehicles

- The Company and drivers share the responsibility for the maintenance of the Company vehicles. The cleanliness of the interior of each vehicle is the responsibility of its driver.

Routine Inspection and Maintenance

- The Company will establish routine inspection and maintenance schedules. The employee who is using the vehicle must check oil and vehicle condition daily before operating the equipment.

Breakdowns

- The Project Manager should be called in the event of a breakdown for instructions or authority to make any repairs. Before calling, the following information should be assembled to give to the Project Manager:
 - Date and time of breakdown
 - The vehicle location and your location
 - Type of problem
 - Vehicle unit number

Vehicle Modifications

- Vehicles will not be modified in any form, except by the Maintenance Department. Examples include tampering with the governors, tachometer, or any other operating components of the vehicle, drilling holes, removing radios, installing heavy gear shift extensions or knobs, or affixing bumper stickers or license plates.

Vehicle Abuse

- Employees are responsible for any Company vehicle they use. The employee will be liable for repairs or replacement of any damage caused by abuse, outside routine operations.

Vehicle Accidents

- All accidents must be reported immediately to the Company. Accident reports must be completed, in writing, on forms furnished by the Company. Failure to provide such notification or falsification of the accident report can lead to disciplinary action, including discharge.
- In the event of an accident, the following procedures should be followed:
 - Immediately after an accident, employees should engage emergency flashers, set out appropriate emergency equipment, including fuses, flares, flags, and/or reflective triangles as required by law. Employees should protect the accident scene without moving the vehicles, if possible.
 - Employees will check for injured persons and get them help immediately. If employees are unsure how or unable to provide help for the injured persons, employees should attempt to comfort the injured persons without moving them.
 - Employees will check for any witnesses to the accident and gather their names and addresses, as well as the names and addresses of all claimants.
 - Employees will notify the county, city, or state officials immediately.
 - Employees will notify a Company Project Manager either at work or at home immediately.
 - After an accident, employees will never accept blame or place blame on any person and will not sign anything. Information will only be given to officials investigating the accident and our Company personnel.

Passengers

- Employees will not allow anyone, other than employees of the Company who are on duty, to ride in any Company vehicle, except by written authorization of an officer of the Company. Under no circumstances will others be allowed to drive a Company vehicle.

Driver's License

- Every individual whose duties require them to operate a vehicle on Company business will have in his/her possession a valid driver's license. A photocopy of the employee's current driver's license must be furnished to the Safety Officer. The employee is responsible for any fines incurred as a result of driving and the individual will pay parking violations.

Insurance

- The Company expects you to carry your own personal liability and physical damage insurance for your own vehicle and any other vehicle you drive per Indiana Bureau of Motor Vehicle regulations.

Miscellaneous

- Driving while under the influence of alcohol or any drugs is prohibited.
- No alcoholic beverages or liquors will be transported in a company vehicle.
- Keys will always be removed and vehicle will be locked when not in use. An extra set of keys will be kept at the office.
- Employees are recommended to keep their vehicles locked while in the parking lot. The Company assumes no responsibility for any damage to, or theft of, any vehicle or personal property on Company property.
- No employee will be required to operate a vehicle that is mechanically unsafe.
- Employees will report all unsafe vehicles to Project Manager.

- All loads should be inspected before driving. Loads will be evenly distributed and tied down when necessary.
- Compressed cylinders must be capped, standing upright and secured in place.
- All containers of flammables must be covered and secured.
- The driver should make sure area is clear to the rear before backing up. The driver will use a signal person if view is obstructed.
- When towing equipment, the driver will make sure the hitch is in good shape and securely closed. Safety chains will also be attached.
- When battery jump-starting, the driver will make certain both batteries are the same voltage.
- Cables will be kept away from radiator fan and belts.
- The driver will always shut off the engine when filling the fuel tank.

Violation

- A violation of any part of the above policy may be cause for immediate discharge or loss of use of the vehicle.

Section 17- Personal Protective Equipment

Purpose

To specify safety requirements and policy guidance on the usage of personal protective equipment (PPE) to protect employees in the work place.

Scope

This policy applies to all Casey-Bertram employees who perform tasks requiring PPE to include: equipment for eyes, face and head, arms, legs, clothing and protective shields. All safety equipment must meet American National Standards Institute (ANSI) Standards and will carry markings of approval.

References

1910.132, Subpart I

Definitions

PPE - Personal Protective Equipment.

Foot and Leg Protection - Safety-toe footwear for employees will meet the requirements and specifications in American National Standard for Men's Safety-Toe Footwear, Z41.1-1967. Examples of types of foot and leg protection include: steel-toed boots or work boots, metacarpal guards, metatarsal guards, etc.

Hand Protection - Protective gloves or glove system that will provide protection against cuts, punctures, and direct contact with chemicals including concrete.

Eye and Face Protection - Eye and face protection for employees will meet the requirements and specifications in American National Standards Institute, Z87.1-1968, Practice for Occupational and Educational Eye and Face Protection. Examples include: glasses, goggles, face shields, welding hood, etc.

Head Protection - Head protection for employees will meet the requirements and specifications in American National Standards Institute, Z89.1-1969, Safety Requirements for Industrial Head Protection.

Procedures

PPE Analysis

- Administrative and Engineering controls will be the first priority (where applicable) to avoid using PPE.

Eye and Face

- Safety glasses with side shields are to be worn at all times. Employees who wear prescription glasses must have eye protection that meets ANSI Z87.1 Standards.
- Employees must use eye and face protection when they are exposed to hazards such as flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation. The protective equipment must be marked to identify the manufacturer.
- Protective eye and face devices bought after July 5, 1994 must comply with ANSI Z87.1 - 1989, "American National Standard Practice for Occupational and Educational Eye and Face Protection."

- Equipment bought before July 5, 1994 must comply with ANSI Z87.1-1968, "USA Standard for Occupational and Educational Eye and Face Protection."
- In general, eye protection and face shields must be appropriate for the particular hazards to which the employees are exposed. Visors are appropriate for those operations where splashing is a hazard. In high heat environments, a special wire screen visor may be worn that allows the heat to dissipate and permits maximum vision for the wearer. Goggles are recommended in situations involving dust, flying particles, sparks, noxious gases, corrosive liquid splashes, and radiation from welding.
- Cup goggles provide added protection where there is the combined hazard of flying particles and severe impact. Some cup goggles also provide ventilation, protection against dust hazards in cement plants, foundries, and compressed air operations. When worn in conjunction with a face shield, cup goggles provide good protection against acids, caustics, and chemicals, and are recommended for babbitting, hot metal casting, and hot metal bath dipping. Face shields are not recommended for use by themselves as basic eye protection since they do not provide impact protection; instead they should be worn over basic eye protection.
- Eye and face equipment should be comfortable, easy to clean, and capable of being disinfected. The fit must be snug enough to protect properly and not restrict the movement of the wearer.
- Eye protection should be cleaned regularly and checked daily for cracks, scratches, pits, or fading. Badly chipped, scratched, or pitted lenses indicate that the surface is broken and should not be used. Safety glasses should be evaluated periodically to ensure that the optical density provided is still at the desired wavelength.
- In addition to providing employees with appropriate eye protection, easily accessible emergency eyewash stations should be provided.

Head

- Hard hats are to be worn at all times. Hard hats are to be worn with the bill protecting the face and in accordance with pertinent safety standards.
- Hard hats bought after July 5, 1994 must comply with ANSI Z98-1986, "American National Standard for Personal Protection - Protective Headwear for Industrial Workers-Requirements."
- Hard hats purchased before July 5, 1994 must comply with the ANSI Z98.1-1969, "American National Standard Safety Requirements for Industrial Head Protection."

Foot

- Steel toed boots are not mandatory, but are recommended. Employees who actively work in construction areas must wear work boots.
- Protective footwear purchased after July 5, 1994 must comply with ANSI Z41-1991, "American National Standard for Personal Protection - Protective Footwear." Protective footwear purchased before July 5, 1994 must comply with ANSI Z41.1-1967, "USA Standard for Men's Safety-Toe Footwear."

Hand

- Various types of gloves may be required. Hazards from which hands need to be protected include skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, and harmful temperatures.

Hearing Protection

- Employees will not be exposed to more than an average of 90 dB over an 8 hour period and hearing protection is required when noise is above 85 dB.
- Employees will be informed of the areas where hearing protection is required.
- Employees wearing hear protection must stay aware of the environment around them.

Protective Clothing

- Employees are to wear appropriate clothing for the tasks being preformed.
- Employees who wear jewelry are to use caution around moving machinery.
- Employees are to wear shirts with sleeves and pants that cover the legs.
- In the warm weather employees should wear light colored clothing that allows the skin to stay cool.
- In the colder weather employees are to wear warm layers of clothing.

Employees will receive training on the proper maintenance, donning, and doffing of PPE.

Section 18- Powered Industrial Trucks

Purpose

Requirements and responsibilities for driver, traffic and vehicle controls to reduce personal injury, vehicle and property damage.

Scope

This section applies to all Casey-Bertram operations, and to vehicles used for Casey-Bertram business.

Definitions

Not applicable to this section.

Responsibilities

All motor vehicle operators will wear seat belts.

Project Managers shall ensure that all motor vehicle operators are properly licensed.

Motor vehicle operators will have in their possession applicable vehicle licenses at all times.

Procedures

Fuel handling and storage

- The storage and handling of gasoline fuel shall be in accordance with NFPA Flammable and Combustible Liquids Coed (NFPA No. 30-1969).

Changing and charging storage batteries

- Battery charging installations shall be located in areas designated for that purpose.
- Facilities shall be provided for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from damage by trucks, and for adequate ventilation for dispersal of fumes from gassing batteries.
- When charging batteries, acid shall be poured into water; water shall not be poured into acid.
- Trucks shall be properly positioned and brake applied before attempting to change or charge batteries.
- Care shall be taken to assure that vent caps are functioning. The battery (or compartment) cover(s) shall be open to dissipate heat.
- Smoking shall be prohibited in the charging area.
- Precautions shall be taken to prevent open flames, sparks, or electric arcs in battery charging area.
- Tools and other metallic objects shall be kept away from the top of uncovered batteries.

Trucks

- The brakes of highway trucks shall be set and wheel chocks placed under the rear wheels to prevent the trucks from rolling while they are boarded with powered industrial trucks.

Operator Training

- Only trained and authorized operators shall be permitted to operate a powered industrial truck. Methods shall be devised to train operators in the safe operation of powered industrial trucks.

- The first part of the training program shall include explanations of safe operation, load limits and general usage information.
- The second part of the program shall also include training on maintenance procedures, specific to the forklift and rollgrab.
- The third part of the program will include supervised operation of the forklift and/or rollgrab.

Truck Operations

- Trucks shall not be driven up to anyone standing in front of a bench or other fixed object.
- No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.
- Unauthorized personnel shall not be permitted to ride on powered industrial trucks. A safe place to ride shall be provided where riding of trucks is authorized.
- The employer shall prohibit arms or legs from being placed between the uprights of the mast or outside the running lines of the truck.
- When a powered industrial truck is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and brakes set. Wheels shall be blocked if the truck is parked on an incline.
- A powered industrial truck is left unattended when the operator is 25 feet or more away from the vehicle which remains in his view or whenever the operator leaves the vehicle and it is not in his view.
- When the operator of an industrial truck is dismounted and within 25 feet of the truck is still in his view, the load engaging means shall be fully lowered, controls neutralized, and the brakes set to prevent movement.
- A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform or freight car. Trucks shall not be used for opening or closing freight doors.
- Brakes shall be set and wheel blocks shall be in place to prevent movement of trucks, trailers, or railroad cars while loading or unloading. Fixed jacks may be necessary to support a semitrailer during loading or unloading when the trailer is not coupled to a tractor. The flooring of trucks, trailers, and railroad cars shall be checked for breaks and weakness before they are drive onto.
- There shall be sufficient headroom under overhead installations, lights, pipes, sprinkler system, etc.
- An overhead guard shall be used as protection against falling objects. It should be noted that an overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., representative of the job application, but not to withstand the impact of a falling capacity load.
- Fire aisles, access to stairways and fire equipment shall be kept clear.

Traveling

- All traffic regulations shall be observed, including authorized plant speed limits. A safe distance shall be maintained approximately three truck lengths from the truck ahead, and the truck shall be kept under control at all times.
- Other trucks traveling in the same direction at intersections, blind spots, or other dangerous locations shall not be passed.
- The driver shall be required to slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.

- The driver shall be required to look in the direction of, and keep a clear view of the path of travel.
- Grades shall be ascended or descended slowly.
- When ascending or descending grades in excess of 10 percent, loaded trucks shall be driven with the load upgrade.
- On all grades the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface.
- Under all travel conditions the truck shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
- Stunt driving and horseplay shall not be permitted.
- The driver shall be required to slow down for wet and slippery floors.
- Dockboard or bridgeplates shall be properly secured before they are driven over. Dockboard or bridgeplates shall be driven over carefully and slowly and their rated capacity never exceeded.
- Running over loose objects on the roadway surface shall be avoided.
- While negotiating turns, speed shall be reduced to a safe level by means of turning the hand steering wheel in a smooth, sweeping motion.
- Except when maneuvering at a very low speed, the hand steering wheel shall be turned at a moderate, even rate.

Loading

- Only stable or safely arranged loads shall be handled.
- Caution shall be exercised when handling off-center loads which cannot be centered.
- Only loads within the rated capacity of the truck shall be handled.
- The long or high (including multiple-tiered) loads which may affect capacity shall be adjusted.
- Trucks equipped with attachments shall be operated as partially loaded trucks when not handling a load.
- A load engaging means shall be placed under the load as far as possible; the mast shall be carefully tilted backward to stabilize the load.
- Extreme care shall be used when tilting the load forward or backward, particularly when high tiering. Tilting forward with load engaging means elevated shall be prohibited except to pick up a load. An elevated load shall not be tilted forward except when the load is in a deposit position over a rack or stack. When stacking or tiering, only enough backward tilt to stabilize the load shall be used.

Operation of the Truck

- If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition.
- Fuel tanks shall not be filled while the engine is running. Spillage shall be avoided.
- Spillage of oil or fuel shall be carefully washed away or completely evaporated and the fuel tank cap replaced before restarting engine.
- No truck shall be operated with a leak in the fuel system until the leak has been corrected.
- Open flames shall not be used for checking electrolyte level in storage batteries or gasoline level in fuel tanks.

Maintenance of Industrial Trucks

- Any power-operated industrial truck not in safe operating condition shall be removed from service. All repairs shall be made by authorized personnel.

- No repairs shall be made in Class I, II and III locations.
- Those repairs to the fuel and ignition systems of industrial trucks which involve fire hazards shall be conducted only in locations designated for such repairs.
- Trucks in need of repairs to the electrical system shall have the battery disconnected prior to such repairs.
- All parts of any such industrial truck requiring replacement shall be replaced only by parts equivalent as to safety with those used in the original design.
- Industrial trucks shall be examined before being placed in service and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily.
- When the temperature of any part of any truck is found to be in excess of it's normal operating temperature, thus creating a hazardous condition, the vehicle shall be removed from service and not returned to service until the cause of such overheating has been eliminated.
- Industrial trucks shall be kept in a clean condition, free of lint, excess oil and grease. Noncombustible agents should be used for cleaning trucks. Low flash point (below 100 deg. F) solvents shall not be used. High flash point (at or below 100 deg. F) solvents may be used.
- Precautions regarding toxicity, ventilation and fire hazard shall be consonant with the agent or solvent used.

Training

Training will be provided at a minimum of every three years for Powered Industrial Trucks.

This policy will be reviewed during annual training.

Section 19- Safety Inspections

Purpose

To document our efforts by evaluating Casey-Bertram jobsites and shop areas thereby identifying safety deficiencies and correcting them.

Definitions

Safety Inspection - A systematic approach to evaluate and document the current status of an organization's safety program.

Responsibilities

All levels of management will be responsible for continually assessing working conditions for compliance with safety and health standards.

All employees are to report any unsafe conditions immediately to their Project Manager. Any employee who works with equipment that is unsafe or allows a known unsafe condition to exist and exposes other employees to danger may be subject to disciplinary action.

The Project Manager will periodically utilize the Safety Inspection Report form to document the findings of ongoing safety evaluations.

Procedures

Inspections are performed by the Project Manager or Safety Officer and may be documented by using the Safety Inspection Report form or similar means.

A copy of the Safety Inspection Report form or other form of report will be forwarded to parties responsible for corrective action.

The measures taken to correct deficiencies will be noted on the inspection report and returned to the job file for recordkeeping.

Section 20- Safety Orientation

Purpose

To provide all new employees with safety training prior to beginning work for Casey-Bertram

Definitions

New Hire Orientation - Sets the Casey-Bertram safety foundation. Presents general information that will be addressed and reinforced in more detail throughout the orientation process.

Procedures

Within the first day of work, the Safety Officer will provide an orientation to all new employees. The New Hire Orientation Form will be completed and signed by both the employee and the Safety Officer. The completed form will detail specific policies discussed and become part of the employee's personnel file.

During the new-hire orientation a review of specific safety procedures and requirements as well as task specific hazards and controls that the new employee needs to understand.

Topics include:

- Hazardous elements specific to the workplace, including hazardous materials, machinery, or noise.
- Hazard control measures such as administrative or engineering controls, safe operating procedures and personal protective equipment.
- Emergency response procedures, evacuation routes, and access to medical assistance.

Items to be covered during the orientation include all policies from safety program as listed in the table of contents.

Section 21- Safety Training and Education

Purpose

To ensure that employees understand established safety and health policies and procedures as mandated by the company or IOSHA.

Scope

This policy applies to all employees so that they may be well trained on their safety responsibilities.

Definitions

Competent Person - Capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and authorized to take prompt corrective action.

Qualified Person - A recognized degree, certificate, or professional standing, or extensive knowledge, training, and experience enabling successful demonstration of ability to solve or resolve problems relating to the subject matter, the work, or the project.

Procedures

Safety training and education will be based on OSHA Regulations 29 CFR 1926, Occupational Safety and Health Standards for Construction Industry, and other internal company safety training requirements.

The following topics should be discussed and reinforced as needed:

- Special conditions, hazards or work practices
- Specialized equipment and personal protective equipment usage
- SDSs pertaining to the work performed
- Accidents and/or incidents that may occur at any Casey-Bertram jobsite

Casey-Bertram will send all Project Managers to an OSHA Construction 10 Hour Class.

Safety Officer will document Casey-Bertram's safety training activities and file documentation in the Casey-Bertram office.

All employees will be trained on the company's safety policy.

Section 22- Signs and Barricades

Purpose

To provide protection to the public and employees.

Definitions

Barricades - obstructions to deter the passage of persons or vehicles.

Signs - warnings of hazard, temporarily or permanently affixed, placed at locations where hazard exist.

Signals - moving signs provided by workers, such as flagmen, or by devices such as flashing lights, to warn of possible or existing hazards.

Responsibilities

Casey-Bertram will be responsible to ensure signs and symbols are visible at all times when work is being performed, and removing or covering them promptly when the hazards no longer exist.

Typical Signs to include:

Danger Signs

- Danger signs will be used only where an immediate hazard exists.
- Danger signs will have red as the predominating color for the upper panel; black outline on the borders; and a white lower panel for additional sign wording.

Caution Signs

- Caution signs will be used only to warn against potential hazards or to caution against unsafe practices.
- Caution signs will have yellow as the predominating color. Borders will be black. The upper panel will be black with the word "caution" in yellow letters. The lower panel will be used for additional sign wording in black letters.

Exit Signs

- Exit signs will be lettered in legible red letters, not less than 6 inches high, on a white field and the principal stroke of the letters will be at least three-fourths inch in width.

Safety Instruction Signs

- Safety instruction signs will be white with green upper panel with white letters to convey the principal message. Any additional wording on the sign will be black letters on the white background.

Directional Signs

- Directional signs, other than automotive traffic signs, will be white with a black panel and a white directional symbol. Any additional wording on the sign will be black letters on the white background.

Traffic Signs

- Construction areas will be posted with legible traffic signs at points of hazard.

- All traffic control signs or devices used for protection of construction workmen will conform to American National Standards Institute D6.1-1971, Manual on Uniform Traffic Control Devices for Streets and Highways.

Signaling

- When operations are such that signs, signals, and barricades do not provide the necessary protection on or adjacent to a highway or street, flagmen or other appropriate traffic controls will be provided.
- Hand signaling by flagmen will be by use of red flags at least 18 inches square or sign paddles, and in periods of darkness, red lights.
- Flagmen will be provided with and will wear a red or orange warning garment while flagging. Warning garments worn at night will be of reflective material.

Barricades

- Barricades for protection of employees will conform to the portions of the American National Standards Institute D6.1-1971, Manual on Uniform Traffic Control Devices for Streets and Highways, relating to barricades.

Section 23- Silica Policy

Purpose

To inform employees and contractors of the hazards associated with working near crystalline silica and protect the employees from the hazards of crystalline silica.

Scope

This section applies to all employees, subcontractors, job classifications, etc. that may be exposed to crystalline silica during routine or non-routine tasks.

Definitions

Action level - means a concentration of airborne respirable crystalline silica of 25 µg/m³, calculated as an 8-hour TWA.

Employee exposure - means the exposure to airborne respirable crystalline silica that would occur if the employee were not using a respirator.

High-efficiency particulate air [HEPA] filter - means a filter that is at least 99.97 percent efficient in removing monodispersed particles of 0.3 micrometers in diameter.

Respirable crystalline silica - means quartz, cristobalite, and/or tridymite contained in airborne particles that are determined to be respirable by a sampling device designed to meet the characteristics for respirable-particle size- selective samplers specified in the International Organization for Standardization (ISO) 7708:1995: Air Quality-Particle Size Fraction Definitions for Health-Related Sampling.

Competent person - means an individual who is capable of identifying existing and foreseeable respirable crystalline silica hazards in the workplace and who has authorization to take prompt corrective measures to eliminate or minimize them.

Properties and Hazards of Silica

Crystalline silica is a basic component of soil, sand, granite, and many other minerals. Quartz is the most common form of crystalline silica. Cristobalite and tridymite are two other forms of crystalline silica. All three forms may become respirable size particles when workers chip, cut, drill, or grind objects that contain crystalline silica.

The dust created by cutting, grinding, drilling or otherwise disturbing these materials can contain crystalline silica particles. Crystalline silica has been classified as a human lung carcinogen. Additionally, breathing crystalline silica dust can cause silicosis, which in severe cases can be disabling, or even fatal. The respirable silica dust enters the lungs and causes the formation of scar tissues, thus reducing the lungs' ability to take in oxygen. Since silicosis affects lung function, it makes one more susceptible to lung infections like tuberculosis. Additionally, smoking causes lung damage and adds to the damage caused by breathing silica dust.

Description of Tasks

-Performing industrial, commercial, or residential demolition towards existing structures for repurpose of land use

Control Methods

Each employee performing a task, outlined in Table 1 of 1923.1153(c)(1), will be protected by fully implementing the engineering controls, work practice controls, and respiratory protection for the task in Table 1.

Below is an *excerpt* from Table 1:

Equipment/task	Engineering and work practice control methods	Required respiratory protection and minimum assigned protection factor (APF)	
		≤ 4 hours/shift	>4 hours/shift
(i) Stationary masonry saws	<p>Use saw equipped with integrated water delivery system that continuously feeds water to the blade</p> <p>Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions</p>	None	None
(ii) Handheld power saws (any blade diameter)	Use saw equipped with integrated water delivery system that continuously feeds water to the blade		
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions:		
	-When used outdoors	None	APF 10
	-When used indoors or in an enclosed area	APF 10	APF 10

For tasks not listed in Table 1 or where engineering and work practice controls are not properly implemented the following procedures will be performed to determine employees' exposure.

- 1) An initial assessment will be performed to determine the 8-hour TWA for all employees that represents the exposures of that job classification on that shift in that area. Where multiple employees performing the same task are working in the same area only a fraction of the employees need to be sampled to provide employee exposure.
 - a) Monitoring will be continued if the following conditions are present after the initial assessment and subsequent monitoring:
 - Exposure above the action level but at or below the permissible exposure limit (PEL) – repeat monitoring within six months of most recent monitoring.
 - Exposures above the PEL – repeat monitoring within three months of most recent monitoring.

- When the most recent (non-initial) monitoring is below the action level repeat monitoring will be done within six months of most recent monitoring.
- b) Monitoring will be discontinued if the following occurs:
 - Initial assessment is below the action level.
 - When two consecutive assessments, done seven or more days apart, are below the action level.
- 2) A reassessment will be performed if there is a change in production, process, control equipment, personnel, work practices, or if there is reason to believe exposures have risen above the action level.
- 3) Employees will be notified within five working days after the assessment session has been completed. Each affected employee will be notified individually of their exposure in writing or the results will be posted in an area that is accessible to all affected employees.
- 4) If the exposure assessment shows that the PEL has been exceeded the employees will be notified of what control measures will be put in place to get the exposure below the PEL.

Engineering and work practice controls will be used to reduce employee exposure to or below the PEL wherever feasible.

Engineering controls include:

- Using equipment with an integrated water delivery system that feeds water to the cutting surface.
- Using equipment with a dust collection system that has an air flow recommended by the manufacturer or greater and have a filter that has a 99% or greater efficiency and filter cleaning mechanism.
- Having proper ventilation when working indoors or in an enclosed space.

Work Practice Controls include:

- Operate and maintain tools in accordance with the manufacturer’s instructions.
- Use a HEPA filter vacuum when cleaning holes.
- Follow proper housekeeping rules.

When engineering and work practice controls are not sufficient enough to reduce the exposure to or below the PEL, then respiratory protection will be used as well as the engineering and work practice controls. When respirator use is required the employees will be provided the proper respirator and a respiratory protection will be implemented that is in compliance with 1910.134.

Work Area Access

When necessary, access to work areas will be restricted to minimize the number of employees exposed to respirable crystalline silica and their level of exposure, including exposures generated by other employers or sole proprietors.

Medical Surveillance

Casey-Bertram will make medical surveillance available at no cost to the employee, and at a reasonable time and place, for each employee who will be required to use a respirator for 30 or more days per year for the protection from silica. All medical examinations and procedures will be performed by a PLHCP. Casey-Bertram will make available an initial

(baseline) medical examination within 30 days after initial assignment, unless the employee has received a medical examination that meets the requirements of this section within the last three years.

The examination shall consist of:

- A medical and work history, with emphasis on: Past, present, and anticipated exposure to respirable crystalline silica, dust, and other agents affecting the respiratory system; any history of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing); history of tuberculosis; and smoking status and history;
- A physical examination with special emphasis on the respiratory system;
- A chest X-ray (a single posteroanterior radiographic projection or radiograph of the chest at full inspiration recorded on either film (no less than 14 x 17 inches and no more than 16 x 17 inches) or digital radiography systems), interpreted and classified according to the International Labour Office (ILO) International Classification of Radiographs of Pneumoconioses by a NIOSH-certified B Reader;
- A pulmonary function test to include forced vital capacity (FVC) and forced expiratory volume in one second (FEV1) and FEV1/FVC ratio, administered by a spirometry technician with a current certificate from a NIOSH approved spirometry course;
- Testing for latent tuberculosis infection; and
- Any other tests deemed appropriate by the PLHCP.

Casey-Bertram will make available medical examinations at least every three years, or more frequently if recommended by the PLHCP. Management will make and maintain an accurate record for each employee covered by medical surveillance. The record will include the following information about the employee:

- Name and social security number;
- A copy of the PLHCPs' and specialists' written medical opinions; and
- A copy of the information provided to the PLHCPs and specialists.

Medical records and monitoring records will be maintained for 30 years plus the length of employment.

Housekeeping

Employees will not perform any dry sweeping or brushing when the activity could lead to exposure to crystalline silica.

The proper housekeeping methods are:

- Wet sweeping;
- HEPA filter vacuuming and;
- Any other methods used to reduce the exposure.

Employees will only use compressed air to clean clothing or surfaces if there is proper ventilation set up to capture all the dust.

Training

Employees which may be exposed to silica will receive awareness training. Employees must be able to demonstrate knowledge and understanding of at least the following:

- The health hazards associated with exposure to respirable crystalline silica;

- Specific tasks in the workplace that could result in exposure to respirable crystalline silica;
- Specific measures Casey-Bertram has implemented to protect employees from exposure to respirable crystalline silica, including engineering controls, work practices, and respirators to be used;
- Identify the designated competent person; and
- The purpose and a description of the medical surveillance program.

Section 24- Subcontractor Conformance

Purpose

To ensure all subcontractors are made aware of and made responsible for compliance with all local, state, and federal laws, Casey-Bertram policies and procedures, and owner requirements.

Scope

This policy applies to contractors, subcontractors, and all other contracted personnel involved with construction and/or maintenance activities on Casey-Bertram's job sites.

Definitions

Pre-Contract Meeting - Not necessarily a meeting, but the time when Casey-Bertram is confirming that the contractor's bid price has included the intended scope of work.

Pre-Contract Meeting Agenda - List of safety items that were communicated during the pre-bid process. Allows Casey-Bertram to confirm that the previously communicated items were understood by the contractor and that pre-contract meeting requirements were fulfilled. Not intended to be all-inclusive and does not represent all safety practices that the contractor is expected to comply with.

Responsibilities

Casey-Bertram's Project Manager must ensure the contents of this policy are presented to subcontractors at the pre-contract meeting.

All Casey-Bertram Project Managers are responsible for notifying and requesting contractor personnel to correct unsafe situation.

Contractors are responsible for addressing safety concerns brought to their attention by Casey-Bertram

Contractors are ultimately responsible to implement, monitor, and enforce their written safety program among their employees and subcontractors.

Contractors are to provide a Job Specific Safety Plan.

Subcontractors are required to designate an Onsite Safety Officer.

Procedures

Subcontractors, at their own expense, will conform to and comply with all requirements set forth by Casey-Bertram, and applicable laws established by any governmental authority. The subcontractor will take all necessary precautions to protect against any conditions caused by subcontractor's work or other involvement in any project, which involves any risk of bodily harm to persons or risk of damage to property.

Subcontractors will continuously inspect their work, materials and equipment to discover any such conditions and will be solely responsible for discovering and correcting any conditions.

Casey-Bertram may order the subcontractor to stop any work deemed unsafe until acceptable corrective measures have been implemented. Subcontractors will be responsible for all costs and delays incurred by Casey-Bertram as a result of any such stoppage of the work.

Casey-Bertram employees will confirm verbally or in writing, during the confirmation of scope of work, that the contractor understood the pre-contract safety expectations. The pre-contract safety subjects may include the following:

- Review of Casey-Bertram Safety Requirements
 - Accident Reporting
 - Contractor Designated Safety Person
 - Disciplinary Policy
 - Fall Protection
 - Fire Protection
 - Ground Fault Circuit Interrupters
 - Hard Hats
 - Housekeeping (Daily Clean-up)
 - Job Site Safety Inspections (Documented Weekly)
 - Ladders
 - Light Duty Work Program
 - Project Specific Hazards
 - Permit System when required
 - Safety Orientation
 - Safety Glasses with Side Shields
 - Scaffolding, and requirements, ladders, guardrails, etc.
 - Safety Shoes
 - Substance Abuse Screening Policy
- Review of IOSHA Standards
 - Hazard Communication
 - IOSHA Poster Requirements
 - Lead
 - Lighting
 - Safety Talks
- Subcontractor Site Safety Communication Meeting
 - Casey-Bertram's Project Managers are responsible for initiating the meeting and reviewing the project safety requirements. Subcontractors will be responsible for explaining to Project Managers the methods and procedures that the subcontractor will be implementing to comply with safety standards.

A meeting should be held with all subcontractors and their onsite supervision. Casey-Bertram representatives at this meeting may include the Project Manager, Safety Officer, Field Manager and Sr. Engineer.

At this meeting Casey-Bertram should review the project safety requirements including the following:

- Accident Reporting
- Subcontractor Designated Safety Person
- Disciplinary Policy
- Fall Protection, 6' requirement, full body harness, shock absorbing lanyard
- Fire Protection
- Ground Fault Circuit Interrupters

- Hard Hats
- Housekeeping
- Job Site Safety Inspections
- Ladders
- Light Duty Work Program
- Project Specific Safety Plan
- Permit System
- Safety Orientation
- Safety Glasses
- Scaffolding
- Shutdowns
- ANSI approved Safety Shoes
- Substance Abuse Screening Policy
- Welding Shields

Subcontractors are required to submit all SDSs for each hazardous material brought onsite. A central location will be established to maintain SDSs.

Subcontractor's designated Safety Representative must have received OSHA 10 hour training.

Training Requirements

This policy will be reviewed with employees at new hire orientation. Casey-Bertram employees will also be instructed in the appropriate method for addressing contractor safety concerns (i.e. not directing corrections, addressing concerns with contractor management, etc.) and explain the philosophy driving this methodology during new hire orientation.

The program will also be reviewed with onsite contractors during the pre-contract meeting.

Section 25– Substance Abuse Policy

Purpose

To reduce the opportunity for accidental injuries to persons, and to protect the property of the company, employees, other workers, customers, and the general public. To detect illegal and unauthorized substance abuse and contraband in the workplace, and to improve safety, productivity, quality workmanship, tardiness and minimize employee absenteeism.

Scope

This policy applies to all Casey-Bertram employees.

Our Substance Abuse Policy may be required to comply with the contractual obligations of our customers, government agreements, or a particular federal, state, or local agency.

Definitions

Alcohol - Any fermented, distilled or manufactured substance which, when consumed, can impair normal functions.

Annual - Not based on a calendar year, but based on 12-month periods with the start of the period reflecting the date the employee began work on the owner's premise.

Company Premises - Includes all buildings, land, vehicles, work areas, jobsites, customer areas and work locations, whether owned, leased, rented, or used by Casey-Bertram, as well as anywhere an employee is working in the course and scope of Company employment and pay status, including while working on the property of another employer, customer, or a client.

Drugs - As used in this policy, the term means any drug, narcotic or other substance of which use or possession is prohibited or controlled by state or federal statute. The term includes substances prescribed by a physician. The terms and conditions under which an employee may use and possess physician prescribed drugs are covered under prescription medicines in this policy.

First Visit Screening - A screening performed upon an employee's initial visit at a healthcare facility due to a work-related injury suffered on company property or the jobsite.

Fitness For Duty Form - A form used to objectively determine reasonable cause for substance abuse testing.

Illegal drugs - A controlled substance included in Schedule I or II, as defined by Section 802 (6) of Title 21 of the United States Code, the possession of which is unlawful under Chapter 13 of that title. The five (5) more common illegal substances include:

- Marijuana (THC metabolite)
- Cocaine
- Amphetamines
- Opiates (including heroin)
- Phencyclidine (PCP)

The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.

Negative Test - A negative screening obtained if: (1) the screen test indicated the absence of legal or illegal substances in excess of the screen limit, or (2) the screen test indicates the presence of legal or illegal substances in excess of the screen limit but the confirming test indicates the absence of legal or illegal substances in excess of the confirmation limits.

Positive Test - A positive test result is obtained if: (1) substance abuse test results indicated the presence of illegal substances in excess of both the screen and confirmation limits, as verified by a Medical Review Officer, and (2) the Medical Review Officer has determined that the test results do not stem from the use of prescriptions medicines, over-the-counter medicines, food, or any cause than the use of illegal substances.

Probable Cause - Probable cause will be defined as those circumstances, based on objective evidence about the worker's conduct in the workplace that would cause a reasonable person to believe that the worker is demonstrating signs of impairment due to alcohol or other drugs. In most cases, the objective evidence giving rise to probable cause will be observed by at least two individuals, but recognizing that in certain circumstances the observation may be made by only one individual. Examples of objective evidence include when a worker shows signs of impairment such as difficulty in maintaining balance, slurred speech or erratic or atypical behavior.

Working Hours - Includes the entire period of normal working hours, including lunch periods and break periods.

Procedures

Prohibited Activities

- Employees are prohibited from manufacturing, possessing, using, selling, distributing, receiving or transporting any controlled substance or illegal drug.
- Employees are prohibited from performing duties or operating heavy machinery while under the influence of alcohol or controlled/illegal substances or drugs.

Testing Requirements

- Pre-Employment Screening Policy
 - All applicants who are being considered for employment will be required to submit to a drug and alcohol screen. If the applicant refuses to consent or tests positive, the applicant will not be allowed to report for work.
- Annual Test
 - Annual drug and alcohol testing will be required upon the date of the employee's original test date.
- For Cause Test
 - If an employee is reasonably suspected of possessing, distributing or selling drugs or alcohol on Casey-Bertram property or jobsite at any time.
 - If the employee's behavior or job performance is reasonable cause to suspect that he/she is under the influence of drugs or alcohol on the job.
 - Employee is unable to perform work in a safe or productive manner.
- First Visit Test

- Employees, as a result of a work-related injury, that require professional medical attention will be subjected to a substance abuse screen upon arrival to the clinic.
- Random Test
 - Random testing times/dates are selected by the Safety Officer will be unannounced with no predictable frequency.
 - Employees refusing to be tested will be interpreted as a positive test and refusal of the test can result in discharge or the employee will have immediate termination.
- Confidentiality
 - All test results will be confidential and only accessible to authorized personnel.
 - It is imperative that confidentiality be maintained at all times.
 - Any positive test results must be confidentially reported to the appropriate employee manager or supervisor.

FIRST OFFENSE will be cause for IMMEDIATE TERMINATION!

Section 26- Toolbox Talks

Purpose

To be used as a means of promoting safety on-the-job. To communicate safety requirements, and to discuss past safety practices and plan upcoming safety activities.

Procedures

Jobsite Project Managers will conduct the weekly safety meetings.

Toolbox talks are most productive when held in the morning. This allows for employees to regain their focus on work activities. The meeting should last approximately 15 minutes focusing on one general topic and spending the rest of the time on project specific information. Some time should also be left to address concerns of the contractor employees. If the answers to stated concerns are not obvious, the meeting leader should take the time to research the concern and then get back with the employee.

The meeting should be used as a means to motivate employees. Any safety deficiencies discussed during the meeting should be done in a positive manner (i.e. "Housekeeping is currently not meeting standard, let's make a strong effort to improve this week" versus "You're a bunch of slobs, housekeeping is pathetic, you're too sloppy").

A written record of the meeting containing a minimum of the instructor's name, date, subjects discussed, and attendee signatures will be kept by the Project Manager.

Section 27- Trenching and Excavation

Purpose

The purpose of this policy is to establish standard guidelines to comply with OSHA 1926.650 and perform work safely in and around excavations.

Scope

This policy applies to all excavations on Casey-Bertram projects.

Definitions

Competent Person - One who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Excavation - Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

Hazardous Atmosphere - An atmosphere which by reason of being explosive, - flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, may cause death, illness, or injury.

Protective System - A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield or shoring systems, and other systems that provide the necessary protection.

Trench (Trench Excavation) - A narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m). If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet (4.6m) or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.

Responsibilities

The assigned competent person is responsible for all aspects of safe trenching and excavation. These responsibilities include (but are not limited to) the following:

- Determination of soil type.
- Observe soil for cracks or fissures.
- Assure that implementation of shielding, shoring, benching, sloping, or other means to protect workers and public from cave in accidents is in place.
- Ensuring proper barricades are erected to prevent pedestrians or motorists from accidentally entering a trench or excavation and to aid in the protection of the trench or excavation being an attractive nuisance.
- Ensuring that employees do not enter trenches that are not shored or braced.

- Removing workers from trenches or excavations whenever conditions are such that workers' safety is jeopardized.

Procedures

Before excavating (Jobsite Preplanning):

- Before opening any excavation, efforts shall be made to identify and eliminate any potential hazards such as:
 - Underground Utilities
 - Groundwater
 - Adjacent Exposures
 - Falls
 - Unstable Soil
 - Hazardous Atmospheres
 - Vibration (vehicle traffic)
- Excavations greater than five feet in depth must be safeguarded from cave-in by the use of a protective system such as:
 - Sloping
 - Shielding
 - Benching
 - Shoring
- When choosing a system the tables and charts found in the OSHA standard 1926.650 should be referenced. If manufactured systems are used the contractor may rely on the data supplied by the manufacturer. Shoring and shielding systems must be used, installed, repaired and removed in accordance with the manufacturer's written instruction or the direction of a professional engineer.
- Call or verify that a call has been made to all Local Utility Companies 48 hours before digging to locate any and all underground installations. This contact must be documented. Call 800-382-5544 Indiana Underground Plant Protection Service.

During Excavation:

- Adequate protection must be provided to protect employees from falling rock, soil, or other materials and equipment. Keep all loose material at least 2 feet from the edges of the excavation.
- Employees should not be permitted to work in excavations where water has accumulated or is accumulating unless adequate precautions have been taken. Diversion ditches, dikes, or other means must be used to prevent surface water from entering an excavation and to provide drainage to the adjacent area. Pump water from the trench before allowing workers to enter the area. The water removal equipment and operations shall be monitored by a competent person to ensure proper operation.
- Before an employee enters an excavation greater than 4 feet in depth, a competent person must test the atmosphere when oxygen deficiency or a hazardous atmosphere exists or could reasonably exist. Emergency rescue equipment must be readily available and must be attended when hazardous atmospheric conditions exist or may develop.

- Employees should not be permitted under loads that are handled by lifting or digging equipment. Employees should not be allowed to work in the excavation above other employees unless the lower level employees are adequately protected. OSHA requires hard hats when in a trench.
- Sufficient means for exiting excavations 4 feet deep or more must be provided and must be within 25 feet of lateral travel for employees. This can usually be accomplished by providing ladders or an earthen ramp.
- Employees exposed to public vehicular traffic must wear warning vests or other suitable garments made of reflective or high-visibility material.

Daily Inspections:

- Daily inspections are performed of excavations, the adjacent areas, and protective systems prior to the start of work and as conditions change by a competent person. All excavations greater than five (5) feet in depth must be constructed under the supervision of a competent person.
- This is done to identify possible cave-in sites, failure of protective shoring or bracing systems, or other hazardous conditions before the start of work and as needed throughout the work shift.
- Inspections shall also be done after every rainstorm or other hazard increasing event.

Training Requirements

- The designated "competent person" shall train workers in the avoidance of excavation and trenching hazards through the use of tool box talks and/or daily work instructions.

Section 28- Welding Safety

Purpose

Requirements and responsibilities for properly communicating the potential hazards of welding and cutting equipment.

Scope

This section applies to all Casey-Bertram's employees and operations.

Definitions

Hot Work - Any work which includes, but is not limited to, the use of burning or welding equipment, brazing equipment, explosion proof electric motors, chippers, drills, saws, extension cords, sand-blasting, spray painting, explosive activated tools, hot plates, phone flash bulbs, and non-explosion proof floor, string lights, maintenance, construction or job operation where the heat used or generated is of sufficient energy to cause the ignition of any flammable or combustible liquid, gas or other material.

Responsibilities

The Project Manager is responsible for implementing this policy.

Procedures

When welding/cutting/lancing on painted surfaces, a pre-task assessment will be required to determine lead content.

Before welding, sweep floors clean, wet down necessary areas, and cover wooden floors with sheet metal or equivalent. On outside work, do not allow sparks to enter building.

Never use cylinders without suitable reducing valves and regulators to insure suitable pressure requirements.

Never interchange oxygen regulators, hoses or other appliances with similar equipment for other gases.

When cutting, direct the flow of free sparks and molten metal in the opposite direction from your feet.

Always wear goggles with suitable filter lenses when using a torch. Wear a head shield or helmet with suitable filter plates when arc welding.

Whenever necessary to hoist oxygen and acetylene cylinders, always use a cradle or suitable platform. Do not use slings around cylinders.

Do not use tape to repair leaks in gas hoses. Replace a faulty hose immediately.

When cleaning welding equipment or hoses do not use compressed air. Use only gas which is intended for use with equipment.

Wear ear plugs when welding in close places. This will help prevent hot slag from entering the ear.

Do not weld or burn on empty containers such as tanks, drums, barrels, pails, cans, or other containers, unless the containers are verified empty and clean.

When welding or burning:

- Wear clothing that provides complete body covering.
- Wear special outer protection (special gloves, gauntlets, chaps, aprons, leggings, jackets for spats) as required for special welding protection.
- During welding, there must be adequate ventilation to exhaust the fumes away from the person welding. Otherwise, the welder must use a respirator suitable for welding fumes.

	Welding	Burning
Safety Glasses	Yes	Yes
Goggles/Tinged Lens	No	Yes
Welding hood/Treated Lens	Yes	No
Face Shield	No	No
Hard Hat	Yes	Yes
Fire Resistant Jacket	Yes	Yes
Welding Gloves	Yes	Yes
Full Length Frontal, Primary Protection (Aluminized Leather or Wool)	No	No
Spats Over Work Shoes or Wear 8" or Higher Boots Covered by Pant Legs	Yes	Yes
Ear Plugs in Close Places	Yes	Yes

Training Requirements

Workmen designated to operate arc welding equipment must have been properly instructed and qualified to operate the equipment as specified in the standard, particularly the portion that deals with matters such as machine hookup, grounding, leaks, switches, manufacturers' instructions, electrode holders, and electric shock.

Workers designated to operate resistance welding equipment must have been properly instructed and judged competent to operate such equipment.

Firewatch personnel shall be trained in the proper use of fire extinguishers.

Section 29- Forms

ACCIDENT INVESTIGATION PROCEDURES

1. Provide emergency response

FIRST PRIORITY IS SAFETY AND HEALTH OF PEOPLE.

- Notify appropriate people – medical, fire, rescue.
 - Depending on seriousness of incident, Project Manager or Safety Officer will accompany injured employee to doctor.
 - Provide care for the injured.
 - “Safe” the area. Prevent other accidents.
 - Notify all members of investigation team.
-

2. Secure the area

- Observe the big picture.
 - Secure, barricade, and isolate the scene.
 - Shut off electrical power and other utilities.
 - Bleed or isolate pressurized systems.
 - Block mechanical equipment—prevent movement.
 - Check air quality.
 - Issue personal protective equipment.
 - Provide emergency power, lighting, air, etc.
 - Secure the scene and protect the evidence. (Rope off or post a guard).
 - Determine extent of damage to equipment, material, or building facilities.
 - Issue lockout/tagout permits.
 - Control crowd and onlookers.
 - COLLECT TRANSIENT AND PERISHABLE EVIDENCE IMMEDIATELY.**
 - Take pictures from several angles or make sketches. Note positions of tools, equipment, material, layout, etc. Note things that melt or evaporate, tire tracks, footprints, loose material on the floor.
 - Collect operating logs and records.
 - Record serial numbers of equipment and identify maintenance records.
 - Put dimensions on all sketches.
 - Sign and date all photos.
-

3. Identify Potential Witnesses

- Identify People
 - Involved in accident
 - Eyewitnesses to accident
 - People who heard the accident
 - People who arrived at the scene after the accident
 - People who were at the scene prior to the accident
 - Anyone who may have useful information about the accident
-

4. Use an Investigation Kit

- Safety Officer has a master kit.
 - Camera (Video, Polaroid, 35 mm) Film
 - Tape Recorder
 - Measuring Devices
 - Sample Collection Containers
 - Interview/investigation Forms
 - Flashlight
 - Barricade Markers
 - Tape
 - Lockout/Tagout
 - Padlocks
-

5. Procure Hard Evidence and Record Data

- Get samples of all possible material at the site.
 - Find all equipment pieces.
 - Get photos from all possible sights and angles.
 - Use appropriate forms.
 - First Aid Reports
 - Injury Reports
 - Accident Investigation Reports
 - Supplementary record of occupational injuries and illnesses
 - Project Manager's Report
 - Injury and illness record of employee
 - OSHA Log 300 and First Report of Injury
 - Note general conditions that may have contributed to the accident.
 - Housekeeping
 - Periodic Rule or Procedure Violation
 - Work Environment or Layout
 - Training, Experience, or Supervision
 - Floor or Surface Conditions
 - Alcohol or Drug Abuse
 - Lighting or visibility
 - Employee Morale or Attitude
 - Noise or distractions
 - Health or Safety Record
 - Air Quality, Temperature or Weather
 - Equipment Condition or Malfunction history
-

6. Conduct Interviews with Witnesses

Assure witnesses that you are not looking for someone to blame; you are looking for the root cause of the accident.

DO:

- Interview as soon as possible.
- Interview at the accident scene
- Take notes or use a tape recorder
- Ask open-ended questions
- Avoid bias

- Put the witness at ease
- Repeat the story back to the witness
- End interview on a positive note

DON'T:

- Pressure the witness
- Blame the witness for the accident
- Interrupt an answer
- Ask questions that can be answered with a yes or no
- Ask "why" questions and opinion questions first

ALWAYS:

- Stress that you only want the facts
- Stress that you want to prevent the next accident
- Take the extra time to get understanding

7. Review Data

- Look at all other possible data or records including:
 - Inspection Reports
 - Maintenance Reports
 - Accident Reports and Analysis Results
- Identify any patterns or trends
- Analyze all data to determine root causes

8. Prepare an Investigation Report

Involve Project Manager and Safety Officer. State facts, not opinion.

- Record any key facts in a written report. Use Accident Investigation Report Form
 - Write down the accident story
 - Note the undisputed facts and the disputed facts
 - Compare the undisputed facts, the disputed facts, and the physical evidence to establish the best answer.
 - Finalize the story and identify the root cause.
- Complete the Accident Investigation Report
 - Who had the accident?
 - When did it happen? (Time/date)
 - When was it reported?
 - What object/agent caused the injury?
 - Who had most control of the object?
 - What happened?
 - What things caused/contributed to the accident?
 - Direct cause(s)
 - Indirect cause(s)
 - Root cause(s)
 - What can be done to prevent recurrence?
 - Who will do it?
 - When will it be done?
 - Names, addresses, phone numbers, and driver's license numbers of witnesses
 - Photos (signed and dated)

- Evidence tagged, recorded and kept
 - Develop interim reports during extended investigations to keep everyone informed
-

9. Implement Corrective Actions

Implement corrective actions to eliminate root causes in all parts of the system.

- Failure to complete this step can lead to criminal charges if accident re-curs because hazards and solutions have been identified and documented in an accident report.
-

10. Follow-up, Classify and Analyze Data and Communicate Results

Compile and analyze all accident and incident data on a regular basis, at least monthly and yearly. Tabulate and cross tabulate to study patterns.

Answer the following questions:

- Are all parts of the company committed to hazard control?
 - Are there patterns to injuries?
 - What is the quality of supervision and management?
 - Are employees empowered to take individual action?
-
-

NEW HIRE ORIENTATION CHECKLIST

Items to be reviewed with new employees by the Safety Officer. Check off each item when it is explained to the new employee.

Employee Name (**Print**): _____

Date: _____ Job Title: _____

SAFETY POLICY / SAFETY RULES

PROGRAM ADMINISTRATION

- ◆ Safety Program Policy
- ◆ Organizational Responsibilities
- ◆ Accident Investigation/Reporting
- ◆ Emergency Response Plan
- ◆ New Hire and Annual Orientation
- ◆ Self Inspection Program
- ◆ Substance Abuse
- ◆ Safety Program Goals
- ◆ General Safety Rules
- ◆ Disciplinary Policy
- ◆ Safety Training and Education
- ◆ Housekeeping

HAZARD IDENTIFICATION, EVALUATION AND CONTROL

- ◆ Compressed Air and Gas
- ◆ Material Handling and Storage
- ◆ Electrical Hazards
- ◆ Fall Protection
- ◆ Flammable Materials and Combustible Liquids
- ◆ Confined Space Entry
- ◆ Fire Protection/ Prevention
- ◆ Hand and Power Tools
- ◆ Machinery and Machine
- Guarding
 - ◆ Hazard Communication
 - ◆ Lockout/Tagout Procedures
 - ◆ Powered Industrial Trucks
 - ◆ Respiratory Protection
 - ◆ Personal Protection
 - ◆ Recordkeeping
 - ◆ Signs, Signals and Barricades
 - ◆ Welding, Torch Cutting and
- Lancing
 - ◆ Stairways and Ladders

MEDICAL PROGRAMS

- ◆ Bloodborne Pathogens
- ◆ Designated Health Care/ Return to Work
- ◆ Hearing Conservation/Protection

Trainer _____ Date _____

Employee _____ Date _____

This form must be completed and signed before an employee is allowed to start work. Employee may retain one copy and the original will be inserted in the employee's file at the office

FITNESS FOR DUTY
REASONABLE CAUSE/OBSERVATION DOCUMENTATION

All employees, you included, occasionally exhibit some performance problems and behavior changes. Sometimes these problems and changes cause concern that an employee may be unfit to perform the employer's regular duties as a result of substance abuse. Below is a checklist of observations for you to use in determining when there is reasonable cause for such concern and possible substance testing.

NAME _____ LOCATION _____

DATE _____ TIME _____

The onset of one or more of the following observations may be cause for substance abuse testing.

- | | | | |
|-------------------------------------|---|-------------------------------------|---|
| SPEECH | AWARENESS | BALANCE | PHYSICAL INDICATORS |
| <input type="checkbox"/> Incoherent | <input type="checkbox"/> Confused | <input type="checkbox"/> Swaying | <input type="checkbox"/> Pupil dilated/red eyes |
| <input type="checkbox"/> Muddled | <input type="checkbox"/> Sleepy | <input type="checkbox"/> Staggering | <input type="checkbox"/> Cold sweats/tremors |
| <input type="checkbox"/> Slurred | <input type="checkbox"/> Erratic Behavior | <input type="checkbox"/> Falling | <input type="checkbox"/> Alcohol/marijuana odor |

When you observe behaviors that may interfere with the employee's performance, you should note and document your observations. The employee should be counseled about any performance problems, and any explanations volunteered or offered by the employee should be noted. Although work related performance or behavior problems may be cause for substance abuse testing, continued work related performance and behavior problems may result in reassignment, or discipline up to and including termination of employment.

WORK OBSERVATIONS

- Unexplained or excessive absenteeism or tardiness
- Unexplained or excessive absence from work area.
- Frequent trips to water cooler, or restroom
- Difficulty in understanding/recalling instructions
- High frequency of accident occurrence

MOODS

- Withdrawn/sad/morbid
- Mood swings high and low
- Extremely sensitive/irritable
- Nervousness/agitation

PHYSICAL INDICATORS

- Rapid Breathing
- Inappropriate wearing of sunglasses

COMMENTS:

To the best of my knowledge and belief this report represents the actions, appearances and/or conduct observed by me and upon which I base my decision to suggest said employee to be tested or be further evaluated by a Project Manager.

EMPLOYEE _____

PROJECT
MANAGER _____

WITNESS _____

NOTE: This report is to be used only as an observation aid, and will remain absolutely confidential

TOOLBOX TALK GUIDELINES

- Hold meetings regularly, such as once a week, so that employees become accustomed to them as part of the work routine.
- Choose a place that is comfortable and free of distractions.
- Choose a time that does not disrupt work activities and at which everyone is alert and most likely to pay attention. The beginning of the day, before work starts, is a good time. The end of a shift is NOT an appropriate time!
- Keep the meeting short and simple; from 15 to 20 minutes is sufficient.
- Your choice of topic should be relevant to the work your crew performs. Stay with one topic for each class.
- Use your resources to develop the talk, but do not read to your audience. Nothing will turn off an audience more quickly than a speaker reading from a paper. Try as much as possible to deliver the talk in your own words, with the printed copy as a backstop or ready reference.
- Use props if possible. Visual aids like charts and pictures can help with retention, provided they are large enough to be seen clearly.
- Encourage participation by your group. Ask them questions, describe an accident and ask them for suggestions on how it might have been avoided.
- Keep attendance records. Have each attendee sign an attendance form. Then the speaker should complete the form and forward it to wherever your company's procedure calls for.
- To summarize:
- **Prepare.** Think, write, read, listen, organize, and practice your talks.
- **Identify.** Don't try to cover too much ground in one session. Focus on one main idea.
- **Personalize.** Bring the subject close to home, to make it more meaningful to your listeners.
- **Visualize.** Create a clear mental picture for your listeners. Use physical objects or visual aids whenever possible.
- **Define.** Make sure you tell your listeners precisely what they should or should not do in order to keep themselves and their co-workers safe and be specific!!

TOOLBOX TALK FORM

Date	Company Name	
Project Number/Name	Meeting Location	Person Conducting Meeting

Items Discussed:*

Problem Areas or Concerns:

Attendees:

Comments:

- * 1. Determine if all corrective measures have been implemented.
 2. Report results of latest site safety inspection.
 3. Review recent injury or accident reports.
 4. Discuss current issues.
 5. Plan future operations with safety in mind.

cc: Project File
 Project Manager
 Safety Rep

EMERGENCY RESPONSE PLAN CHECKLIST

		<u>YES</u>	<u>NO</u>
1.	Have you obtained SDSs from subcontractors for all hazardous chemicals in your workplace?	_____	_____
2.	Does your plan include emergency escape procedures and route assignments for all employees?	_____	_____
3.	Have accessible areas, with escape routes, that can serve as a temporary refuge for all employees been identified?	_____	_____
4.	Are floor plans or workplace maps that clearly show escape routes and refuge areas available to your employees?	_____	_____
5.	Have a sufficient number of people been trained to assist in an orderly evacuation.	_____	_____
6.	Does the plan detail procedures for accounting for all employees after the evacuation is completed, with a responsible person to report any missing personnel?	_____	_____
7.	Are emergency telephone numbers posted on or near telephones and at other conspicuous locations?	_____	_____
8.	Does your plan include the names or regular job titles of people who must be notified in case of an emergency and who may be contacted for further information or explanation of duties?	_____	_____
9.	Does each employee know how to report an emergency?	_____	_____
10.	Does your plan have an adequate and distinctive alarm system (3 blasts from air horn or truck) that all people can hear or see?	_____	_____
11.	Has someone been assigned to meet with the media?	_____	_____
12.	Have all employees been trained in evacuation plans, alarm systems, reporting procedures, and types of potential emergencies?	_____	_____
13.	Are employees retrained at least annually, and whenever equipment, materials, processes, or procedures change?	_____	_____
14.	If your jobsite does not have a hospital or other treatment facility close by, do you have an adequate number of employees on each shift who are trained in first aid procedures?	_____	_____
15.	Do you have adequate first aid supplies on hand?	_____	_____
16.	Do employees who may be exposed to corrosive materials have ready access in their work areas to flushing equipment or eye washes? Are they trained to use it?	_____ _____	_____ _____
17.	Have arrangements been made with local health care facilities to handle medical emergencies?	_____	_____
18.	Have arrangements been made with local ambulance services?	_____	_____

PERSONAL PROTECTIVE EQUIPMENT CHECKLIST

A checklist of questions to survey for personal protection problems should be tailored to each employer's operations. Some of the items may include:

	<u>YES</u>	<u>NO</u>
1. Is personal protective equipment provided, used, and maintained wherever it is necessary?	_____	_____
2. Is employee-owned personal protective equipment, such as gloves and protective shoes, adequate and properly maintained?	_____	_____
3. Is eye protection available where debris or flying objects could be a hazard?	_____	_____
4. Are ear plugs or muffs provided and worn during noisy conditions?	_____	_____
5. Is slip-resistant footwear worn?	_____	_____
6. Are respirators provided when necessary?	_____	_____
7. Are there written standard operating procedures for the selection and use of respirators?	_____	_____
8. Is the user instructed and trained in the proper use of respirators?	_____	_____
9. Where practicable, are respirators assigned for use by employees individually?	_____	_____
10. Are respirators cleaned and disinfected after use?	_____	_____
11. Are respirators stored in a convenient, clean, and sanitary location?	_____	_____
12. Are routinely used respirators inspected during cleaning?	_____	_____
13. Is the proper respirator in use for the hazard present ?	_____	_____

SAFETY INSPECTION REPORT

Person(s) making Inspection: _____ Title: _____

Date: _____ Time: _____

Job Name/Number/Location: _____

1. JOB-SITE INFORMATION:	YES	NO	DATE CORRECTED/ COMMENTS
a. OSHA and other job-site warnings posted.			
b. Adequate first aid equipment available.			
c. Accident investigation forms available.			
d. Emergency phone numbers conspicuously posted.			
2. HOUSEKEEPING and SANITATION:			
a. General neatness of the working areas.			
b. Passageways and walkways clear.			
c. Waste containers provided.			
d. Adequate supply of drinking water available.			
e. Adequate lighting.			
f. Trash receptacle for drinking cups.			
g. Adequate number of toilet facilities provided and kept clean.			
3. FIRE PREVENTION:			
a. Fire instruction/training provided to personnel.			
b. Fire extinguishers identified and checked.			
c. Hydrants clear, access to public roads.			
d. Housekeeping.			
e. "No Smoking" signs posted and enforced where needed.			
f. Storage, use and handling of flammable and combustible liquids in accordance with standards.			

4. ELECTRICAL INSTALLATION:	YES	NO	DATE CORRECTED / COMMENTS
a. Wiring is insulated and fused properly.			
b. All electrical equipment is grounded, all extension cords are of the three prong type.			
c. Double insulating tools are used.			
d. All terminal boxes equipped with required covers.			
e. Lock Out/Tag Out Program.			
5. HAND TOOLS:			
a. Proper tools for each job.			
b. Neat and secure storage area.			
c. Inspection and maintenance procedures.			
d. System for reporting/replacing damaged tools.			
6. POWER TOOLS:			
a. All power tools are properly grounded and double insulated.			
b. All power tools are guarded.			
c. Pneumatic power tools, fuel power tools, hydraulic power tools properly guarded.			
7. POWDER ACTUATED TOOLS:			
a. All operators are qualified.			
b. PPE available and in good working order.			
c. Tools and charges protected from unauthorized use, and are in good working order.			
8. LADDERS:			
a. Ladders are inspected and in good condition.			
b. Step ladders fully open when in use.			
c. Metal ladders not used around electrical hazards.			
d. Ladders are equipped with safety footings.			
9. SCAFFOLDING:			
a. Scaffold is plumb and square with cross bracing.			

9. SCAFFOLDING: (CONTINUED)	YES	NO	DATE CORRECTED/ COMMENTS
a. Guardrails and toeboards on all scaffolds and platforms > 10' high. Scaffolds that are less than 45" in their least dimension are required guardrails 4' or higher.			
b. Damaged components identified and repaired or replaced.			
c. Access ladder provided for scaffolds.			
d. Scaffold footing and anchorage.			
e. Scaffold height is < 4 times minimum base.			
10. HOISTS, CRANES and DERRICKS:			
a. Approved slings, chains, hooks and eyes.			
b. Outriggers are downward.			
c. Power line signs in plain view of operator.			
d. Signal men where needed.			
11. MOTOR VEHICLES / HEAVY EQUIPMENT:			
a. Regular inspection and maintenance.			
b. Lights, brakes, warning signals operative.			
c. Haul roads well maintained and laid out properly.			
d. Noise arresters in use.			
e. Guards over moving parts.			
f. Proper fire protection.			
g. Operators licensed and qualified.			
h. Personnel carried in a safe manner.			
12. BARRICADES:			
a. Floor openings planked over or barricaded.			
b. Roadways and sidewalks effectively protected.			
c. Adequate lighting provided.			
d. Traffic controlled.			
13. HANDLING and STORAGE OF MATERIALS:			
a. Materials are properly stored or stacked.			
b. Passageways are clear.			
c. Stacks on firm footings, not too high.			

13. HANDLING and STORAGE OF MATERIALS: (CONTINUED)	YES	NO	DATE CORRECTED/ COMMENTS
d. Protection against falling into hoppers or bins.			
e. Dust protection is observed.			
f. Extinguishers and other fire protection available.			
g. Traffic is controlled in the storage area.			
14. PERSONAL PROTECTIVE EQUIPMENT:			
a. Eye protection.			
b. Face shields.			
c. Respirator and masks.			
d. Head and or face protection.			
e. Gloves, aprons and sleeves.			
f. Ear/hearing protection.			
g. Safety harnesses and lifelines used.			
h. Proper shoes, trousers and shirts.			
15. SITE SETUP - TRAILERS and STORAGE YARD			
a. Proper steps, landings and handrails.			
b. Existing utilities flagged, protected and insulated.			
c. Bulletin Board posted with the following:			
- OSHA Standards/Poster			
- Emergency Phone Numbers			
- OSHA 300 form posted (each February).			
- Contractor Safety Rules.			
- Assured Grounding Program.			
- Emergency Procedures for Fire/Accident.			
- Workers' Compensation, EEO, Minimum Wage, Prevailing Wage information.			
- Hazard Material Container Labeling Poster.			
d. Required signs - Hard Hats, No Smoking, Fire Extinguisher.			
e. Required Special Permits - Burning, Welding, Traffic, Confined Space Entry.			
f. Office Files:			
- Maintenance records for cranes.			
- P.E. designs for trenches, daily soil logs, trench box certifications.			

f. Office Files: (CONTINUED)	YES	NO	COMMENTS / DATE COMPLETED
- Lifting chain certifications.			
- Training Records.			
- Accident Report Forms.			
- Written Hazard Communication Program.			
- SDSs for all on site materials.			
- Hazard Chemical inventory list.			
- Medical - First Aid Program.			
- Weekly Jobsite Safety Checklist.			
- Adequate Ventilation.			
- Lead Exposure.			
- Asbestos Exposure.			
- Weekly Safety Meeting Reports.			

